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FUTURE

THE ARKANSAS LONGITUDINAL STUDY ON HEALTH AND AGING

YEAR ONE REPORT
1987

ARKANSAS ASSOCIATION OF AREA AGENCIES ON AGING
IN COOPERATION WITH ARKANSAS DEPARTMENT OF HUMAN SERVICES
DIVISION OF AGING AND ADULT SERVICES

THE ARKANSAS LONGITUDINAL STUDY ON HEALTH AND AGING

YEAR ONE REPORT, 1987

State and Regional Results

Based on Interviews with 6097 Elders

in 4015 Households

by

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for

The Arkansas Association of Area Agencies on Aging in cooperation with the Arkansas Department of Human Services, Division of Aging and Adult Services

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In the next four decades, the reality of an aging society will greatly influence every aspect of our national health, social, and economic institutions.

The magnitude of the change that will confront us is beyond our historical experience...

... While the challenge is clear, solutions are often obscured by the lack of accurate information....

John Heinz, Chairman
Special Committee on Aging
United States Senate

... Aging...is clearly the wave of the future and, unless our society is to be caught up in and swept away by the undertow, we must begin preparing now for for the challenges that lie ahead even as we struggle to cope with the harsh realities of the present.

Cyril F. Brickfield
Executive Director
American Association of Retired Persons

Source: *Aging America: Trends and Projections* (American Association of Retired Persons, 1984), pp. ii-iii.

America is aging. At the turn of the century less than 7% of the population was 60 years or older. Today persons age 60 and older account for over 16% of the U.S. population. The trend is continuing; for the last two decades the 65 plus population grew twice as fast as the rest of the population. Because of the "baby-boomers," it is estimated that in year 2050 one of every three people will be 55 plus and one of four will be over age 65.

The greying of our population has profound implications for our nation, Arkansas included.

With over 18% of our state's population age 60 or older, Arkansas offers a glimpse into the future. But what is known about older Arkansans? Surprisingly little. Even less is known about their future. What services will be needed? What kinds of employment, housing, transportation will we need to develop for the year 2000, 2010, 2030, and beyond? We need information about the factors that effect the course of life in later years such as determinants of health, disability, and enjoyment.

Important to Arkansas is the question of what resources will be needed to care for our elders. With limited resources and a rapidly growing aging population, we need to be precise in our use of public monies. To plan well we need to have good information about real needs in Arkansas.

The Arkansas Longitudinal Study on Health and Aging by the Association of Area Agencies on Aging in cooperation with the Department of Human Services, Division of Aging and Adult Services is an effort to provide the information we need. Through the work of the Southwest Long Term Care Gerontology Center, we have begun a five year longitudinal study of 6097 elders in 4015 households. The Year One Report provides many insights and much valuable information about our citizens age 55 and over and their needs.

Dixie Clark	Herb Sanderson
Dixie Clark, President Arkansas Association of Area Agencies on Aging	Herb Sanderson, Deputy Director Division of Aging and Adult Services

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Laura Wilson, Ph.D. Principal Investigator	Karen Harlow, Ph.D. Co-Principal Investigator	Penny Ramsdell, Ph.D. Project Director
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EXECUTIVE SUMMARY
ARKANSAS LONGITUDINAL STUDY ON HEALTH AND AGING: YEAR I

The development of programs and policies concerning service delivery for elders is especially critical in Arkansas. Although we rank 27th among other states in the number of elders 65 or older, we rank second in terms of percent of elders in the population. The 65 or older age group grew 31.4% between 1970-80 and an additional 7.4% since 1980. This age group is projected to increase approximately 2% per year between now and 2020 (compared to an increase of less than 1% for younger persons). The oldest old (85 plus) segment of the population will experience the most rapid growth before 2000. The youngest old (65-74) segment will increase fastest between 2000 and 2020.

This executive summary highlights the findings of the comprehensive report from year one of the Arkansas Longitudinal Study on Health and Aging. The first year of data collection provides the base line profiles against which changes in functional impairment, service utilization, hospitalization, institutionalization, and caregiving patterns will be measured during the subsequent years of study.

Eight separate samples were selected--one from each Area Agency on Aging planning region. More than 4,000 households participated in the survey, and information was gathered for more than 6100 individuals 55 or older in those households. Detailed findings from all the survey questions are contained in the comprehensive Year One Report. Readers seeking more detailed information are encouraged to refer to the full report.

HIGHLIGHTS

> One third of the households studied experienced the hospitalization of an elder during 1985 or 1986.

> In almost one-fourth of the households, an elder had outpatient surgery or received emergency room care.

> Elders with incomes under $15,000 had higher rates of hospitalization than elders with higher household incomes, with the exception of households with incomes under $4,000 where hospitalization rates were lowest of all income groups.

> The great majority of elders in this sample live in single family housing and own their own homes.

> More than 30% live in single person households.

> A larger percentage of black elders in live in housing needing major repairs than do white elders, and as would be expected, the lower the household income, the greater the need for major repairs.

> A greater proportion of black elders need general financial assistance than do white elders.

> Just under 3% of the respondents report difficulty obtaining the services of a physician. Rate of difficulty differs significantly by region of residence and household income.

> The lower the household income, the higher the rate of difficulty in obtaining services of a physician. Reasons for difficulty differ by region, race, and income. Black elders report more difficulty in affording physician services and more difficulty in getting care because of transportation problems than do white elders. Lack of money and lack of transportation are also the primary reasons lower income elders have difficulty obtaining physician services.

> Over 11% of the respondents predict a need for new housing arrangements within two to three years. The greatest need for new housing arrangements expected by elders in Arkansas is for smaller places that are easier to care for.

> Just under one-fifth of the retired elders in Arkansas would like to return to work. Almost three-fourths of these individuals would prefer part-time work.

> Difficulties in Activities of Daily Living (ADLs) were measured by self report for limitations in feeding oneself; bathing or shampooing; dressing/grooming; toileting; and walking without assistance from others (or crutches, wheelchair). Instrumental Activities of Daily Living (IADLs) were measured by questions concerning problems cooking, doing light housework/ normal chores; doing yard work/heavy cleaning; doing laundry; using the telephone; shopping; taking medication; conducting business

affairs/managing checking account; and getting places outside walking distance without special transportation or assistance. Female elders report significantly more difficulties than males, black elders report more significantly more difficulties than whites, the "old old" report more difficulties than the "young old," and poorer elders report significantly more problems than wealthier elders.

> For the most part, elders who have difficulty with ADLs rely on family and friends for informal help. The activity with which elders are most likely to receive formal assistance is heavy housework/yardwork.

> Most Arkansas elders report good to excellent overall health status, but almost a fourth report only fair or poor health. More older men smoke and drink than do older women. White elders report better health status and lower smoking rates than do black elders. Older elders report poorer health and less smoking and alcohol consumption than younger elders. Higher income elders report better health and more consumption of alcoholic beverages than lower income elders.

> Chronic health problems which can lead to the need for services were also examined in the first year of this study. The most common health problems for elders in Arkansas, as in the rest of the country, are arthritis and hypertension. Female elders report more problems than males, black elders report more health problems than whites, older elders report more health problems than younger elders and lower income elders report more health problems than higher income elders.

> Among the specific services studied, elders report the greatest use of legal services and the greatest perceived unmet need for case management services. Use of and need for services tends to increase with age except in the cases of counseling and employment training, for which service utilization decreases with age.

> Just under 6% of the elders in the community-based sample meet the criteria for Level III nursing home care, 3% meet the criteria for Level II care, and just over 2% meet the criterion for Level I care. Potential need for Level III care differs significantly by region.

> Over 12% of the respondents in the study have no one they can depend on if they become sick or disabled. A smaller proportion of black elders have someone to depend on than do white elders, and elders with household incomes under $15,000 are less likely to have someone to depend on than elders with household incomes over $15,000. Three-fourths of the respondents have family within one hour's traveling time, and most see them daily or weekly.

> Just over one-third of the respondents indicate that they have made life style changes as a result of things they have read or heard about healthier living. The changes cited most frequently are improved diet, more exercise, and cessation of smoking. Respondents with at least some college education are more likely to have made changes than respondents with only a high school diploma or less education.

> Although less than 3% of the respondents report that they are dissatisfied with their lives, 8% are quite often lonely, another 27% are sometimes lonely, and 29% consider themselves worse off than they were five years ago. Older respondents experience more frequent loneliness and are more likely to see their situation as worse than five years ago than are younger respondents.

Similar data from seven other states/sites constitute the National Panel Study on Health and Aging (NPSHA). The NPSHA tracks more than 25,000 elders in these sites across a five year period. Chapter 5.0 in the Year One report details findings from the first four sites, Arkansas, Maryland, Massachusetts, and Texas.

THE ARKANSAS LONGITUDINAL STUDY ON HEALTH AND AGING: YEAR ONE

The financing and delivery of health and social services to elders in the United States remains one of the most important policy issues facing State and Federal officials. Recent attention to the crises faced by elders as a result of catastrophic illnesses has resulted in a move toward a federal policy to address those concerns. Evolving along with concerns about catastrophic illness episodes is an awareness of the potential for increasing demands for community-based, long-term care for an aging population.

The development of programs and policies concerning service delivery for elders is especially critical in Arkansas. Although Arkansas ranks 27th among other states in number of elders 65 or older, it ranks second in percent of residents these elders comprise in the state's population. According to 1984 Census projections, 14.3% of Arkansas's residents were 65 years or older. This age group grew 31.4% between 1970-80 and an additional 7.4% since 1980. A major concentration of elders in a state's population requires a specific sensitivity and understanding of the service needs and future demand for various programs among its citizens.

As an unprotected budget category, programs supported by the Older Americans' Act are particularly vulnerable to Federal cuts. Service providers at the state and local levels will be forced to absorb losses from any Federal cuts to achieve deficit reduction, and any funding changes will require the reallocation of existing resources to areas of the greatest need and highest priority. This competition for shrinking resources requires support of the most sophisticated planning tools available. Scientifically accurate needs assessments can support an effective and efficient planning process.

Federal cuts have also riddled the existing national data bases which states often use to plan for services. Even these very sophisticated data bases are often inaccurate at the state or local planning level. Ideally, when planning and projecting the need for future services, a data base should be accurate at a local level. The State of Arkansas has undertaken a major database development effort in order to provide accurate assessment of needs and dependable projections of future needs at the local Area Agency on Aging planning level. The project has been undertaken with the Southwest Long Term Care Gerontology Center, one of eleven regional resource centers in the United States, to develop one of the most sophisticated planning tools available to any state in the nation. The commitment has been made to a longitudinal research process which tracks a panel of elders across a five year time frame to determine changes in need for, and access to, services.

This report represents a summary of the findings from the first instrument which was developed in consultation with the Arkansas Division of Aging and Adult Services and the Arkansas Association of Area Agencies on Aging. Because of the comprehensive nature of the survey, the number of findings to report are quite extensive. In this first report, the goal is to summarize the findings for the State and each of eight Area Agency on Aging regions. The document is intended for use as a planning tool. The authors of the report cannot assume the role of local planner since local delivery decisions must be weighed in a community context and evaluated by local service deliverers. Many of the findings raise interesting questions which require more detailed analysis. Several more detailed reports will result from this research effort, and three in-depth studies have already been launched. For example, special reports will be produced concerning: use of services after hospitalization episodes; a profile of family caregivers and their needs; and a more detailed analysis of the housing needs of elder residents. The value of a longitudinal effort is that questions which emerge from these initial findings can be addressed in later phases of the study.

The remainder of this report presents the overall findings from the first year of data collection. After this introduction, Chapter 2.0 describes the methodology for this project, and Chapter 3.0 summarizes the characteristics of 6,097 elders 55 or older who are part of this major research effort. Chapter 4.0 details the findings on a multitude of issues, and Chapter 5.0 compares the findings in Arkansas to findings from similar studies in other states.

2.0 METHODOLOGY AND SAMPLING STRATEGY FOR THE ARKANSAS LONGITUDINAL STUDY OF HEALTH AND AGING

One of the most important aspects of developing a sound data base for planning is reliance on a scientifically correct methodology and a sample representative of the group it proposes to describe. Traditionally, to develop these kinds of data bases, face-to-face interviews were utilized. This approach to data gathering has for many years been considered the mainstay of social science research.

When population surveys were required, social scientists relied upon well-trained interviewers who visited respondents in their homes and conducted interviews. However, this method is prohibitively expensive and time consuming. Frequently the resulting research is based on inadequate sample sizes for generalization to critical subgroups in a population. The increasing costs and other difficulties associated with this kind of interview encouraged researchers to look at different forms of data collection. Some researchers experimented with surveys which were mailed to respondents. Surveys which involved mailing instruments frequently resulted in high non-response rates, as some respondents simply did not complete or return their surveys. In addition, respondents were sometimes confused by questions and with no interviewers present to explain or clarify, many questions were left blank on returned surveys (Siemiatycki, 1979; Siemiatycki, Campbell, Richardson and Aubert, 1984; Siemiatycki and Campbell, 1984).

The problems associated with mailed surveys led to continued experimentation with different methods for data collection. In the 1970's, encouraged by the high subscription rates for telephones, many researchers began to use telephones for their surveys. Telephone surveys had several immediate advantages. First, they were relatively inexpensive. The cost of an interview conducted over the telephone is usually 80% less than the cost of a face-to-face interview. Second, the response rate is also very high; people are usually quite willing to answer questions. This willingness to cooperate is especially true for surveys focusing on health, education, or safety issues. Lastly, if respondents are unclear about the meaning of a question, interviewers are present to answer questions and clarify unclear points or issues.

Telephone surveys, however, can have limitations. For example, the earliest surveys frequently did not include unlisted telephone numbers. This problem has been overcome with the use of computer programs that generate a sample of telephone numbers from all possible telephone numbers. Despite the eradication of this problem there are other issues which remain. Some people may not be willing to stay on the phone to complete a survey. Higher income households may have more than one telephone line, increasing their opportunities to be interviewed and thus the possibility of overcounting. Hearing impaired may be underrepresented in telephone surveys, and some investigators fear that lower income households may be undercounted. Other researchers have feared that self-reporting of the kinds of health and service need issues with which this survey is concerned might be inaccurate.

2.1 Rationale for Primary Reliance on Telephone Surveys

While all these concerns are legitimate, several major research activities have been completed to document the reliability of information received in telephone surveys and to determine the feasibility of using self-reports as a basis for a planning tool. In 1984, a methodology for identifying persons with disabling conditions in the community was piloted by the Institute of Urban Studies, University of Texas at Arlington (Harlow and Rosentraub, 1984). The primary purpose of that study was to determine an appropriate strategy for identifying persons with problems and with needs for services. Three interviewing methodologies were compared: face-to-face; mail; and telephone. Approximately one-fifth of the individuals contacted in person refused to participate in this study, compared to one-third of those contacted by phone and 87% of those mailed surveys. Response rates are clearly higher for persons contacted in person or by phone than for persons contacted by mail.

Equally important as the response rate is the quality of responses to specific items on a survey instrument. In the Texas study, an item analysis of nine demographic questions indicated a higher response rate in telephone surveys than in face-to-face and mailed surveys. The refusal to answer selected items was under 4% for all demographic questions except income when interviewing was conducted via telephone. Comparable figures for mail surveys was 7%, and for face-to-face surveys, selected refusal rate was 9% excluding income.

A third issue of concern is the representativeness of the individuals who do respond to surveys. A comparison of unweighted samples from the telephone and mail surveys with U.S. Census data indicated that, while both undersampled Black and Hispanic households, the telephone survey was much more representative of these groups, especially of Black households, and required a very small weighting function to match the proportions in the U.S. Census population. Adjustments to the mail survey would have had to be quite large. Age cohorts in the telephone samples were very close to U.S. Census data and required even smaller weighting factors.

A fourth concern is that the population without telephones might be more disabled or that face-to-face interviews can somehow better record problems which might not be identified over the telephone. In the pilot study, a comparison of disability prevalences indicated that participants in face-to-face samples reported a significantaly higher percentage of problems in six of 160 comparisons, and participants in the telephone surveys reporte a significantly higher percentage of problems in four comparisons. Ninety-four percent of the time the prevalence rates were comparable.

Finally, some researchers have questioned the reliability and validity of self-reported health data from elderly individuals. Several major national health studies have addressed these issues and concluded that self-reports are generally highly accurate and are better predictors for utilization of health care and social services than are physician diagnoses (Fillenbaum, 1978; Herzog and Dielman, 1985; Maddox and Douglass, 1973; McKinlay, 1985; Rowe, 1983). Reliance on self-reporting is a major component of some of the most comprehensive and prestigious national health surveys currently conducted such as the National Long Term Care Surveys of 1982 and 1984, the National Health Interview Survey Supplement on Aging, 1984, and the Longitudinal Supplement on Aging, 1986.

A cost comparison of the three survey methods, calculating management as well as data collection costs resulted in figures which ranked face-to-face costs at $28.08 per completed interview (in 1984 dollars); mail surveys cost $18.53 per completed instrument; and telephone surveys cost $18.20 per completed survey. An additional management factor in favor of telephone surveys over face-to-face is the greater ability of supervisors to monitor interviewers and insure that interviews are properly conducted.

The result of the pilot study was a recommended methodology for a statewide needs assessment that consists of telephone interviews with households selected by random sampling, supplemented by face-to-face interviews in selected areas with low telephone subscription or with high concentrations of extremely low income/minority residents who may be less likely to have access to telephones. Based on the success of the pilot study in Texas which focused on all age groups, a model needs assessment was completed in 1985 for the Texas Department of

Aging by the Southwest Long Term Care Gerontology Center (SWLTCGC). This study adapted the methodology and applied it to elder populations with success. The Texas experience provided a test model for use of this approach with aging populations and also provided a market for perfecting many of the questions. This experience was coupled with the skills of Arkansas aging personnel to develop the instruments to be used in this study.

2.2 Sample Selection for the Arkansas Longitudinal Study

Three major goals guided the selection and development of the samples for this study. First, the sample size for each of the eight regions had to be large enough to produce information reliable for that area. Second, the overall sample size for the state had to be large enough to produce subsamples such as Black or frail elders for special analyses in large enough numbers to provide accurate analyses. A third concern was the initial development of a sample size large enough to allow for expected mortality across a five year period and still end the project with a sample large enough to allow meaningful analyses. To accomplish these goals, a sample size of 500 households per region was selected with the protocol of collecting informtion for every household member 55 or older. This strategy produced a two tier sample of respondent data for at least 500 individuals per region and a much larger sample of data, obtained from an elder respondent about each elder in the household, from each region. Certain questions which only a respondent could answer about him/herself were reserved for respondent only anlayses. These questions included attitudes, beliefs, or fears about personal health problems. Other types of information which have been validated in other national studies as reliable when obtained from an informant are included in the individual data analysis file. The findings section of this report clearly delineates those variables which were asked only for respondents.

The telephone sample is comprised of approximately 9000 random telephone numbers. Of these, 2500 numbers are purely random numbers drawn from the state of Arkansas as a whole and not selected by specific region. Another 6500 numbers were randomly drawn from census tracts in each region identified by U.S. Census data as containing concentrations of elders 55 or older. Initially, 750 targeted numbers were randomly drawn for each AAA region. Later 250 additional targeted numbers were randomly drawn for Regions II and VI as these regions had slightly lower completion rates. Reliance on targeted numbers increases efficiency in interviewing but also increases the chance that the sample does not truly represent the characteristics of the elder population in Arkansas. To guard against any bias, the purely random sample was compared to the targeted sample on several critical demographic dimensions. No significant differences were found indicating no biases in the targeted sample. If differences had been noted, statistical weights would have been applied to reflect the findings from the purely random sample. Both targeted and random households are combined for the final total.

The face-to-face enrichment sample was comprised of random addresses from 15 Arkansas counties. The counties were selected on the basis of high poverty, high minority population, and low per capita telephone services. Two counties meeting these criteria were selected in each AAA region except Region VIII, where all the random addresses were selected from one county. The purpose of the face-to-face portion of this survey was not to compare the results of two data collection methodologies. Those questions have been adequately addressed in many other studies. Building on those other studies, senior project staff selected these counties for enrichment purposes in hard to reach areas. **The face-to-face sample is not a validation sample.** Based on the selection criteria, prevalence rates should be higher for these counties than is true for the random telephone sample. The purpose of this enrichment activity was to produce enough respondents who are typically hard to reach in these kinds of studies and to weight their responses back into the random sample in appropriate percentages.

Each address selected randomly generated a "cluster" of five additional addresses. Because of the low population density and the rugged terrain in some of the rural areas selected, different cluster configurations were approved for different sites. In well populated areas, the traditional cluster configuration was used to draw the sample. In areas where houses were few and far between, a unidirectional cluster configuration was used to reduce time and mileage in locating addresses.

The 249 seed addresses generated a potential sample of 2094 addresses. From the potential sample, 484 age eligible households were identified, i.e., 23.1% of all households had members age 55 or older. Four hundred and twenty households completed the survey (86.8%), one terminated the interview before completing the survey, and 63 refused to participate in the survey (13%). These completion rates compare very favorably with those in other states who have completed these types of projects. The participation rates for the telephone survey were also above 80%. In general, the interviewing staff reported enthusiasm and interest from the respondents and more willingness to participate than has been identified in any other state participating in this data gathering effort.

2.3 Verification and Weighting of the Data

When data collection was completed, comparisons along several demographic dimensions were made to Census data. In each case, the most up-to-date projections available were utilized. In three regions, very small statistical weights were applied to realign the racial composition of this sample to the projections of the Census. The realignment was accomplished by multiplying all responses of white elders by a constant of less than 1 and all nonwhite respondents by a constant value slightly more than 1. The overall sample size remains approximately the same size, but each group is corrected according to its proportion in the population. Following this process assumes the correctness of Census data, and many researchers may not accept this assumption. In most cases, however, Census data are still considered to be the most accurate data base for comparison.

In addition to the small racial weights which were applied, the sample included more elders over 65 than one would have expected and slightly under-represented the 55-64 age group. Small weights were applied based on age characteristics to bring these figures into line with Census data. All data were compared using weighted and unweighted formula. In almost all cases, application of the weights changed the findings by only .1%, and in no case does the direction or ranking of any findings change when these formula are used. Individual data users are free to use the developed weighting strategies or to delete them as they desire since their inclusion has little impact. Documentation concerning exact weights will be supplied to any potential users through the Arkansas Division of Aging and Adult Services.

To adhere as closely as possible to Census figures, senior project staff have elected to utilize the weighted formula throughout this report. Therefore, each table presented in the remainder of this study reflects weighted samples rather than the actual number of surveys completed. Protocol for presenting findings also requires reporting most findings with the number of individuals who actually answered a question. Although the actual sample includes information from 6,097 individuals, in some tables that number will vary. This variance simply means that not all individuals participating in the study actually answered that question.

2.4 Accuracy of Sample Statistics

Often individuals who participate in research studies or who hear about the results express concern about how accurate a finding can be when only a few people are questioned. Since surveys do not interview every individual in a group, some very small error or bias is unavoidable. The confidence one can place in sample statistics depends on sample size as well as the sampling procedure and the statistical weighting process.

In this study, large sample sizes were selected to reduce sampling error to the greatest extent possible. For example, a sample size of 500 per region was selected to produce a sampling error rate of 4% at the 95% confidence level. What this means is that if a particular prevalence level of 10% for a problem such as heart disease is reported, one can have 95% confidence that the proportion of persons who have this problem in the total population represented by this sample will range between 6% and 14%. For most regional analyses, the sampling error is 4% and for the state as a whole, the sampling error is less than 3%. For planning purposes, the general requirement is that a sampling error not exceed 5-7%. Therefore, this sample should produce slightly more accurate figures than most studies of this sort.

The statistical procedures for this base-line study vary according to the nature of the data. For much of the data which are nominal (simply a yes/no response), the appropriate statistic is Chi Square. In other cases, where ordinal or interval data are available, more sophisticated statistical tools are applied. When tests of significance are reported throughout the findings, the reader is cautioned to remember that statistical significance simply means that a region or a subgroup differs from the findings for the state as a whole. The statistical procedure simply implies that this finding did not happen by chance. It does not imply a value or relative importance for that finding.

In other words, if these data identify statistically significant differences among the AAA regions, only local planners can decide if these differences are important in the planning process.

****

The word "significant" is used in a statistical sense, not as a substitution for "importance."

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3.0 SAMPLE CHARACTERISTICS

The sample studied can be described in terms of two different units of measure: households studied and elders studied. The households studied are randomly selected households in Arkansas that contain at least one individual age 55 or older. The elders studied are all of the persons age 55 or older in the randomly selected households who reside in the home, that is, who are not institutionalized. All household and elder data used in the following sections are weighted according to the protocol described in Chapter 2.0.

3.1 Household Characteristics

3.1.1 Weighted State Sample

The state sample is comprised of eight separate subsamples for a total of 4015 households. Over 30% of the households studied are single-person households, almost 60% are two-person households, and less than 10% contain three or more persons. Most of the two-person households are comprised totally of elders. Only 16% of the households studied contain persons under age 55. Just over 2% of the households studied have younger members who are physically or mentally impaired (12.9% of the households with younger members), and in 1.4% of the households studied, an elder has primary responsibility for caring for the younger person with the limitations (59.2% of the households with impaired younger members). A third of the households studied have annual household incomes below $7000. See Tables 3-1 to 3-3 for a breakdown of household characteristics by state and region.

TABLE 3-1
HOUSEHOLD COMPOSITION BY STATE AND AAA REGION
(ALL HOUSEHOLDS)

Composition Characteristic	Percentage of Households in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
Total Number of Persons in Household									
One	31.1	32.0	37.0	35.0	38.8	36.1	37.1	32.2	35.0
Two	59.6	54.8	51.5	51.0	49.5	54.2	51.5	57.2	53.5
Three+	9.3	13.1	11.5	14.0	11.7	9.7	11.4	10.6	11.5
Number of Persons 55+ in Household*									
One	41.3	44.0	52.0	49.4	52.1	45.5	51.3	43.8	47.6
Two	57.2	52.6	45.7	47.3	45.1	51.2	47.4	53.4	49.8
Three+	1.5	3.4	2.3	3.3	2.8	3.3	1.3	2.8	2.6
Number of Persons <55 in Household*									
None	87.0	82.9	81.3	81.5	82.7	89.0	82.5	84.1	83.7
One	8.4	11.5	12.8	10.4	11.9	7.4	9.6	12.6	10.6
Two	2.3	2.8	2.5	3.8	3.9	2.7	3.7	2.2	3.0
Three+	2.3	2.8	3.4	4.3	1.5	1.0	4.2	1.1	2.6
Households with Impaired Member <55	2.6	3.0	3.1	2.1	2.7	1.3	2.3	1.0	2.3
Households in which Elder is Primary Caregiver for Impaired Member <55	1.4	2.2	2.0	1.3	1.6	0.5	0.8	0.7	1.4
Number	488	505	537	540	527	448	499	465	4009

*Chi square significant at the .05 level
**Chi square significant at the .01 level

TABLE 3-2
ANNUAL HOUSEHOLD INCOME BY STATE AND AAA REGION
(ALL HOUSEHOLDS)

Annual Household Income Level	Percentage of Households in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
Noncumulative*									
0-$3999	9.4	11.3	10.7	10.0	5.7	5.4	11.2	6.7	8.9
$4000-6999	22.4	23.2	34.6	26.2	28.0	25.2	27.9	21.5	26.2
$7000-9999	15.7	20.9	15.2	15.0	18.7	14.9	16.2	17.4	16.8
$10000-14999	19.4	18.5	13.2	18.0	16.2	17.2	18.9	19.9	17.6
$15000-19999	11.7	10.6	8.4	11.5	8.6	11.9	8.4	11.3	10.3
$20000-29999	9.9	8.2	8.7	10.8	7.5	13.7	10.4	7.7	9.6
$30000+	11.4	7.2	9.1	8.6	15.2	11.6	7.1	15.5	10.6
Cumulative*									
< $4,000	9.4	11.3	10.7	10.0	5.7	5.4	11.2	6.7	8.9
< $7,000	31.8	34.5	45.3	36.2	33.7	30.6	39.1	28.2	35.1
< $10,000	47.5	55.4	60.5	51.2	52.4	45.5	55.3	45.6	51.9
< $15,000	66.9	73.9	73.7	69.2	68.6	62.7	74.2	65.5	69.5
< $20,000	78.6	84.5	82.1	80.7	77.2	74.6	82.6	76.8	79.8
< $30,000	88.5	92.7	90.8	91.5	84.7	88.3	93.0	84.5	89.4
Number	383	396	392	404	378	326	362	328	2969

*Chi square significant at the .0001 level

TABLE 3-3
REGIONAL RANKING OF HOUSEHOLD CHARACTERISTICS
(ALL HOUSEHOLDS)

Household Characteristic	AAA Region I	II	III	IV	V	VI	VII	VIII
Average Number of Persons in Household*	3	2	6	1	8	7	5	4
Average Number of Persons 55+ in Household**	1	2	6	5	7	4	8	3
Average Number of Persons <55 in Household**	7	4	3	1	5	8	2	6
Average Annual Household Income Level***	4	6	8	5	3	2	7	1

Key: 1 = High 8 = Low

* Analysis of variance significant at .05 level.
** Analysis of variance significant at .01 level.
*** Analysis of variance significant at .0001 level.

3.1.2 Regional Differences

As Tables 3-1 to 3-3 indicate, there are statistically significant regional differences in the average number of individuals in a household, in the number of elders in a household, and in the number of younger household members. There are no statistically significant regional differences in average annual household income. See

Appendix A for more detailed statistical findings.

3.1.3 Regional Samples

Region I (Northwest Arkansas)

The Region I sample consists of 488 households. It has the largest percentage of two-person households in a region, and the smallest percentage of single-person and more-than-two-person households. Region I also ranks highest in number of elders per household and next to lowest in number of younger persons per household.

Region II (White River)

The sample in Region II consists of 505 households. It ranks second highest in number of persons per household and in number of elders per household. It has the largest percentage of households in which elders are the primary caregivers of impaired younger household members, and has the largest percentage of households with annual incomes below $4000.

Region III (East Arkansas)

The Region III sample consists of 537 households. It has the highest percentage of households with three or more elders and the highest percentage of households with impaired younger members. It also reports the lowest average annual household income.

Region IV (Southeast Arkansas)

The sample in Region IV consists of 540 households. It ranks highest in number of persons per household and highest in number of household members under 55.

Region V (Central Arkansas)

The Region V sample consists of 527 households. It has the greatest percentage of single-person households and the smallest percentage of two-person households. Region V ranks lowest in number of persons per household and second lowest in number of elders per household. It has the greatest percentage of households with three or more persons under 55.

Region VI (West Central Arkansas)

The sample in Region VI consists of 448 households. It ranks lowest in number of persons under age 55 per household and second lowest in number of persons per household. It has the smallest percentage of households in which elders are primary caregivers for impaired younger members, and it ranks highest in average annual income.

Region VII (Southwest Arkansas)

The Region VII sample consists of 449 households. It ranks lowest in number of persons over 55 in a household and second highest in number of younger household members. It ranks second lowest in average annual household income.

Region VIII (Western Arkansas)

The sample in Region VIII consists of 465 households. It ranks second highest in average household income, and has the lowest percentage of households with impaired younger members.

Summary

> **Region V has the largest percentage of single-person households, and Region I has the smallest. The average number of persons in a household is highest for Region IV and lowest for Region V. Region II has the largest percentage of households with three or more elders, and Region VII has the smallest. The average number of house-**

holds members age 55 or over is highest for Region I and lowest for Region VII.

3.2 Elder Characteristics

3.2.1 Weighted State Sample

The state sample of individuals is comprised of every elder in the household sample and includes a total of 6097 elders. Sixty percent of the elders are female, and 40% are male; 85.7% are white, and 14.3% nonwhite. The average age for the sample is 68.1 years, with an age range from 55 to 114 years. Almost half of the elders have less than high school education, and more than one-fourth completed their formal education with a high school diploma. Over half are retired, and less than one-fourth work either full or part-time. Almost a third of the elders have annual household incomes of less than $7000. Two-thirds of the sample are currently married, and one-fourth are widowed. See Tables 3-4 to 3-9 for a breakdown of elder demographic characteristics by state and region.

TABLE 3-4
SEX, RACE, AND MARITAL STATUS OF ELDERS BY STATE AND AAA REGION (ALL ELDERS)

	Percentage of Elders in Region/State								
Characteristic	I	II	III	IV	V	VI	VII	VIII	AR
SEX									
Female	58.2	56.4	62.1	60.9	61.5	61.0	61.3	58.8	60.0
Male	41.8	43.6	37.9	39.1	38.5	39.0	38.7	41.2	40.0
RACE*									
White	98.2	96.3	80.3	67.8	83.5	92.7	74.8	94.2	85.7
Black	.7	3.2	19.2	31.5	15.6	5.6	24.7	3.7	13.3
Other	1.1	.4	.5	.7	.9	1.7	.6	2.1	1.0
MARITAL STATUS*									
Married	73.6	71.1	62.9	65.8	65.5	71.1	64.5	74.7	68.6
Widowed	20.5	21.5	30.5	26.8	26.8	23.3	27.7	20.9	24.8
Separated/Div	3.1	3.4	3.7	5.0	4.7	3.0	4.1	2.3	3.7
Never Married	2.6	4.0	2.6	2.2	3.0	2.5	3.4	1.9	2.8
Other	.2	-	.3	.1	-	.1	.3	.2	.1
Number	769	774	792	811	786	674	734	728	6068

*Chi square significant at the .0001 level.

TABLE 3-5
AGE OF ELDERS BY STATE AND AAA REGION
(ALL ELDERS)

Age Range	Percentage of Elders in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
Noncumulative*									
55 to 59	13.4	17.7	18.4	19.1	16.3	18.0	18.7	25.7	18.4
60 to 64	27.0	25.5	22.5	22.6	23.6	21.8	22.5	22.5	23.5
65 to 69	16.9	16.8	18.4	16.9	16.6	15.6	14.9	16.6	16.6
70 to 74	17.6	15.9	17.8	16.8	17.1	20.5	16.5	12.9	16.9
75 to 79	12.9	12.5	10.6	12.1	13.3	13.8	12.9	12.6	12.6
80 to 84	8.3	8.0	7.4	7.7	8.0	6.6	8.4	7.1	7.7
85 Or Older	4.0	3.7	4.9	4.9	4.9	3.7	6.1	2.6	4.4
Cumulative*									
Under 60	13.4	17.7	18.4	19.1	16.3	18.0	18.7	25.7	18.4
Under 65	40.4	43.2	40.9	41.7	39.9	39.8	41.2	48.2	41.9
Under 70	57.3	60.0	59.3	58.6	56.5	55.4	56.1	64.8	58.5
Under 75	74.9	75.9	77.1	75.4	73.6	75.9	72.6	77.7	75.4
Under 80	87.8	88.4	87.7	87.5	86.9	89.7	85.5	90.3	88.0
Under 85	96.1	96.4	95.1	95.2	94.9	96.3	93.9	97.4	95.7
Number	769	774	792	811	786	674	734	728	6068

*Chi square significant at the .001 level.

TABLE 3-6
EDUCATION LEVEL OF ELDERS BY STATE AND AAA REGION (ALL ELDERS)

Education Level	Percentage of Elders in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
Noncumulative*									
< HS	43.3	53.9	58.7	52.9	37.1	43.2	47.4	46.5	48.0
HS/GED	28.9	28.4	23.5	28.0	33.0	31.3	32.0	31.7	29.5
Some Col/Tech	15.2	9.9	11.1	10.6	15.2	12.2	12.0	12.6	12.3
4-yr College	7.4	5.9	3.9	5.9	8.0	7.8	6.2	6.5	6.4
Grad/Prof	5.2	1.8	2.8	2.6	6.8	5.5	2.4	2.7	3.7
Cumulative*									
< HS	43.3	53.9	58.7	52.9	37.1	43.2	47.4	46.5	48.0
< Some College	72.2	82.3	82.2	80.9	70.1	74.5	79.4	78.2	77.5
< 4-yr College	87.4	92.2	93.3	91.6	85.3	86.7	91.4	90.8	89.8
< Grad/Prof	94.8	98.1	97.2	97.4	93.3	94.5	97.6	97.3	96.2
Number	766	771	790	809	777	674	731	728	6045

*Chi square significant at the .0001 level.

TABLE 3-7
EMPLOYMENT STATUS OF ELDERS BY STATE AND AAA REGION
(ALL ELDERS)

Employment Status	Percentage of Elders in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
UNGROUPED*									
Retired	58.4	55.0	48.2	52.2	62.4	57.1	56.3	55.9	55.6
Full-time Emp	15.1	17.0	20.0	19.1	15.3	16.4	19.2	22.8	18.1
Caregiver	7.8	7.2	6.8	5.5	5.1	5.6	6.0	3.5	6.0
Poor health	6.1	5.8	7.4	8.7	3.2	5.5	5.1	5.3	5.9
Don't want job	4.7	3.2	7.1	6.0	5.3	6.6	5.1	6.0	5.5
Part-time Emp	5.3	6.8	6.0	4.9	5.1	5.0	5.6	4.4	5.4
Work at home	1.0	1.8	2.9	2.5	2.1	2.7	.9	1.1	1.9
Can't find job	1.3	2.4	1.3	.4	1.0	1.0	1.2	.7	1.2
Other	.4	.6	.3	.7	.4	.1	.6	.3	.4
GROUPED*									
Retired	58.4	55.0	48.2	52.2	62.4	57.1	56.3	55.9	55.6
Employed Full/Part	20.4	23.8	26.0	24.0	20.4	21.4	24.8	27.2	23.5
Caregive/Work at Home	8.8	9.0	9.7	8.0	7.2	8.3	6.9	4.6	7.9
Poor health	6.1	5.8	7.4	8.7	3.2	5.5	5.1	5.3	5.9
Don't want job	4.7	3.2	7.1	6.0	5.3	6.6	5.1	6.0	5.5
Can't find job	1.3	2.4	1.3	.4	1.0	1.0	1.2	.7	1.2
Other	.4	.6	.3	.7	.4	.1	.6	.3	.4
Number	765	772	791	806	783	674	732	726	6049

*Chi square significant at the .0001 level.

TABLE 3-8
ANNUAL HOUSEHOLD INCOME OF ELDERS BY STATE AND AAA REGION (ALL ELDERS)

Annual Household Income Level	Percentage of Elders in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
Noncumulative*									
Under $4000	7.3	9.0	8.3	7.5	5.2	4.1	9.8	5.4	7.1
$4000-6999	20.4	20.9	31.3	22.5	22.2	20.7	25.3	17.2	22.6
$7000-9999	15.3	21.7	18.5	16.1	18.5	15.0	16.7	17.5	17.5
$10000-14999	20.8	20.6	14.9	19.4	17.2	17.9	19.5	22.2	19.1
$15000-19999	13.1	11.4	9.2	12.9	10.5	13.9	8.4	12.7	11.5
$20000-29999	10.6	8.0	8.9	11.7	8.5	15.4	11.7	7.7	10.2
$30000+	12.5	8.2	9.0	10.0	17.9	13.0	8.6	17.2	12.0
Cumulative*									
< $4,000	7.3	9.0	8.3	7.5	5.2	4.1	9.8	5.4	7.1
< $7,000	27.7	29.9	39.6	30.0	27.4	24.8	35.1	22.6	29.7
< $10,000	43.0	51.6	58.1	46.1	45.9	39.8	51.8	40.1	47.2
< $15,000	63.8	72.2	73.0	65.5	63.1	57.7	71.3	62.3	66.3
< $20,000	76.9	83.6	82.2	78.4	73.6	71.6	79.7	75.0	77.8
< $30,000	87.5	91.6	91.1	90.1	82.1	87.0	91.4	82.7	88.0
Number	586	590	572	609	552	486	515	507	4418

*Chi square significant at the .0001 level.

TABLE 3-9
REGIONAL RANKING OF ELDER CHARACTERISTICS
(ALL ELDERS)

Characteristic	AAA Region I	II	III	IV	V	VI	VII	VIII
Average Age*	3	7	5	6	2	4	1	8
Average Education Level**	2	7	8	6	1	3	5	4
Average Annual Household Income Level**	4	6	8	5	3	1	7	2

Key: 1 = High 8 = Low

* Analysis of variance significant at .001 level.
** Analysis of variance significant at .0001 level.

3.2.3 Regional Differences

As Tables 3-4 to 3-9 indicate, there are no significant statistical differences in the regional distribution of elders by sex, but significant differences are found by race, age, education, employment status, marital status, and income. Since each of these demographic characteristics have been linked in aging literature to health conditions and service utilization patterns, it is expected that these differences will influence regional findings, and that these differences will play a vital role in planning and decisionmaking at the local level. See Appendix A for more detailed statistical findings.

3.2.4 Regional Samples

Region I (Northwest Arkansas)

Of the 769 elders studied in Region I, 58.2% are female and 41.8% are male; 98.2% are white and 1.8% nonwhite; 43.3% did not complete high school, 28.9% have a high school diploma or GED, and 27.8% have some formal education beyond high school; 58.4% are retired, 20.4% work full or part-time, 7.8% did not work for health reasons, 4.7% do not wish to work or have never worked, and 2.7% are unemployed for other reasons; 73.6% are married and 20.5% widowed. There average age is 68.6, and their average income is slightly above the average for the state sample.

Compared to other regions, Region I has the highest proportion of nonwhite elders, the lowest proportion of elders who are employed full-time, the highest proportion of elders who are caregivers, and the lowest proportion of elders who are widowed. Region I elders rank third oldest in average, second highest in average education level attained, and fourth highest in average annual household income.

Region II (White River)

Of the 774 elders studied in Region II, 56.4% are female and 43.6% male; 96.3% are white and 3.6% nonwhite; 53.9% did not complete high school, 28.4% have a high school diploma or GED, and 17.7% have some formal education beyond high school; 55.0% are retired, 23.8% work full or part-time, 7.2% do not work because of caring for someone in the home 5.8% do not work because of poor health, 3.2% do not wish to work or have never worked, and 4.8% are unemployed for other reasons; 71.1% are married and 21.5% are widowed. Their average age is 67.9, and their average income is below the average for the state sample.

Compared to other regions, Region II has the highest percentage of male elders, the lowest percentage of elders from ethnic groups other than white and black, the highest percentages of elders who work part-time or cannot find a job, the lowest percentage of elders who do not want to work, the highest percentage of elders with annual household incomes of $30,000 or more. Region II elders rank second youngest in average age, second lowest in average education level attained, and third lowest in average annual household income.

Region III (East Arkansas)

Of the 792 elders studied in Region III, 61.2% are female and 37.9% male; 80.3% are white and 19.7% nonwhite; 58.7% have not completed high school, 23.5% have a high school diploma or GED, and 17.8% have some formal education beyond high school; 48.2% are retired, 26.0% work full or part-time, 7.4% do not work because of poor health, 7.1% do not wish to work or have never worked, 6.8% do not work because of caring for someone in the home, and 4.5% are unemployed for other reasons; 62.9% are married and 30.5% widowed. Their average age is 68.2, and their average income is below the average for the state sample.

Compared to other regions, Region III has the highest proportion of female elders, the highest proportion of elders who did not complete high school, the lowest proportion of elders who are retired, the lowest proportion of elders who are married, and the highest proportion of elders who are widowed. Region III elders rank fourth youngest in average age, lowest in average education level attained, and lowest in average annual household income.

Region IV (Southeast Arkansas)

Of the 811 elders studied in Region IV, 60.9% are female and 39.1% male; 67.8% are white and 32.2% nonwhite; 52.9% have not completed high school, 28.0% have a high school diploma or GED, and 19.0% have some formal education beyond high school; 52.2% are retired, 24.0% work full or part-time, 8.7% do not work because of poor health, 6.0% do not wish to work or have never worked, 5.5% do not work because of caring for someone in the home, and 3.6% are unemployed for other reasons; 65.8% are married and 26.8% are widowed. Their average age is 68.1, and their average income is approximately the average for the state sample.

Compared to other regions, Region IV has the highest percentage of black elders, the highest percentage of elders who cannot work because of poor health, the lowest percentage of elders who cannot find a job, and the highest percentage of elders who are separated or divorced. Region IV elders rank third youngest in average age, third lowest in average education level attained, and fourth lowest in average annual household income.

Region V (Central Arkansas)

Of the 786 elders studied in Region V, 61.5% are female and 38.5% male; 83.5% are white and 16.5% are nonwhite; 37.1% have not completed high school, 33.0% have a high school diploma or GED, and 29.9% have some formal education beyond high school; 62.4% are retired, 20.4% work full or part-time, 5.3% do not wish to work or have never worked, 5.1% do not work because of caring for someone in the home, 3.2% do not work for health reasons, and 3.5% are unemployed for other reasons; 65.5% are married and 26.8% widowed. Their average age is 68.6, and their average income is above the average for the state sample.

Compared to other regions, Region V has the lowest proportion of elders who have not completed a high school degree and the highest proportions of elders who have completed a high school degree or GED, taken some college courses, completed a four-year college degree, or completed a graduate or professional school degree. Region V also has the highest proportion of elders who are retired, the lowest proportion of elders who cannot work because of poor health, and the highest proportion of elders with annual household incomes of $30,000 or more. Region V elders rank second oldest in average age, highest in average education level attained, and third highest in average annual household income.

Region VI (West Central Arkansas)

Of the 674 elders studied in Region VI, 61.0% are female and 39.0% male; 92.7% are white and 7.3% nonwhite; 43.2% have not completed high school, 31.3% have a high school diploma or GED, and 25.5% have some formal education beyond high school; 57.1% are retired, 21.4% work full or part-time, 6.6% do not wish to work or have never worked, 5.6% do not work because of caring for someone in the home, 5.5% do not work for health reasons, and 3.8% are unemployed for other reasons; 71.1% are married and 23.3% widowed. Their average age is 68.3, and their average income above the average for the state sample.

Compared to other regions, Region VI has highest percentages of elders between 70 and 79 years of age. Region VI also has the lowest percentages of elders with annual household incomes below $4000 and the highest percentages of elders with annual household incomes between $15,000 and $29,999. Region VI elders rank fourth oldest in average age, third highest in average education level attained, and highest in average annual household income.

Region VII (Southwest Arkansas)

Of the 734 elders studied in Region VII, 61.3% are female and 38.7% male; 74.8% are white and 25.3% are nonwhite; 47.4% have not completed high school, 32.0% have a high school diploma or GED, and 20.5% have some formal education beyond high school; 56.3% are retired, 24.8% work full or part-time, 6.0% do not work because of caring for someone in the home, 5.1% do not wish to work or have never worked, 5.1% do not work because of poor health, and 2.7% are unemployed for other reasons; 64.5% are married and 27.7% widowed. Their average age is 68.7, and their average income is below the average for the state sample.

Compared to other regions, Region VII has the highest proportions of elders age 80 or older, the lowest proportion of elders who are needed to work at home, and the highest proportion of elders with annual household incomes below $4000. Region VII elders rank oldest in average age, fourth lowest in average education level attained, and second lowest in average annual household income.

Region VIII (Western Arkansas)

Of the 728 elders studied in Region VIII, 58.8% are female and 41.2% male; 94.2% are white and 5.8% nonwhite; 46.5% have less than a high school education, 31.7% have a high school diploma or GED, and 21.8% have some formal education beyond high school; 55.9% are retired, 27.2% work, 6.0% do not wish to work or have never worked, 5.3% do not work because of poor health, 3.5% do not work because of caring for someone in the home, and 2.1% are unemployed for other reasons; 74.7% are married and 20.9% widowed. Their average age is 66.7, and the average income is above the average for the state sample.

Compared to other regions, Region VIII has the highest percentage of elders between 55 and 59 years of age, and the lowest percentages of elders 85 and over. Region VIII also has the highest percentage of elders who are employed full-time, the lowest percentages of elders who are caregivers or work part-time, the highest percentage of married elders, and the lowest percentages of elders who are separated or divorced or never married. Region VIII elders rank youngest in age, fourth highest in education level attained, and second highest in average annual house income.

Summary

> **Region III has the highest proportion of female elders, and Region II the lowest. Region III has the highest proportion of nonwhite elders, and Region I the lowest. The average age of elders is highest in Region VII and lowest in Region VIII. The average education level attained is highest in Region V and lowest in Region III. Region V has the highest proportion of retired**

elders, and Region III the lowest. Region VIII has the highest proportion of employed elders, and Region I the lowest. Region VIII has the highest proportion of married elders, and Region III the lowest. Average annual household income is highest in Region VI and lowest in Region III.

4.0 FINDINGS

The results of the study are grouped according to unit of analysis: findings for households, findings for all elders, and findings for respondents only. The findings are organized by major topical areas. Household findings include types of medical treatment received by household elders, out-of-pocket medical expenses, current housing, primary means of transportation, and need for financial help, employment, new housing arrangements, or physician's services. Findings for all elders include current assets and activities, functional disabilities and chronic health problems, and medical and social services used or needed. Findings for respondents only include length of residence in Arkansas, support system, frequency of visits to doctors, health-related life style changes, feared illnesses, and current life satisfaction.

4.1 Household Findings

Household findings include recent medical treatment, out-of-pocket medical expenses, current housing situation, primary means of transportation, and need for commodities and services such as financial assistance, physician's services, a new housing arrangement, or employment.

4.1.1 Medical Treatment

Respondents were asked whether during 1985 or 1986 any elders in the household were (1) hospitalized, (2) required outpatient surgery or emergency room care, (3) received regular outpatient treatment such as dialysis, radiation, or physical therapy, or (4) felt they should have been hospitalized but were not. If any of the responses to these items were positive, the household was targeted for recall and a more in-depth interview, which will result in a more detailed report. See Table 4-1 for a breakdown by state and region of the percentage of households in which elders received medical treatment during 1985 or early 1986.

TABLE 4-1
MEDICAL TREATMENT RECEIVED DURING 1985/1986
BY STATE AND AAA REGION
(ALL HOUSEHOLDS)

Medical Treatment	Percentage of Households in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
Hospitalization*	34.2	38.2	29.8	29.9	33.8	35.6	32.7	30.3	33.0
Outpatient Surgery/ER Services	26.1	23.8	21.7	21.3	24.3	23.0	22.9	23.5	23.3
Outpatient Treatment	6.5	9.3	6.8	7.1	8.5	6.3	8.4	7.8	7.6
Felt Need For Hospitalization**	4.2	7.8	8.4	4.8	4.4	3.7	7.9	3.7	5.7
Number	488	505	536	540	527	448	499	464	4006

*Chi square significant at .05 level.
**Chi square significant at .001 level.

In one-third of the households studied, one or more elders had been hospitalized one or more times during 1985 or 1986. In almost one-fourth of the households, one or more elders had outpatient surgery or utilized emergency room services during the same period. In less than ten percent of the households did elders receive regular outpatient treatments of any kind. Approximately six percent of the respondents felt that an elder in their household should have been hospitalized but was not.

There were statistically significant relationships between rate of hospitalization and region, and felt need for hospitalization and region. Region II had the highest rate of hospitalization, and Region III had the lowest. Region III also had the largest percentage of elders who reported that they felt the need to be hospitalized but were not.

Table 4-2 provides a breakdown of medical treatment by race, and Table 4-3 provides a breakdown of medical treatment by household income.

TABLE 4-2
MEDICAL TREATMENT RECEIVED DURING 1985/1986
BY RACIAL/ETHNIC GROUP
(ALL HOUSEHOLDS)

	% of Households in Racial/Ethnic Group			
Medical Treatment	White	Black	Other	All
Hospitalization*	33.5	28.7	45.6	33.0
Outpatient Surgery/ ER Services**	24.2	17.7	29.2	23.3
Outpatient Treatment	7.7	6.6	10.6	7.6
Felt Need For Hospitalization***	4.8	10.4	11.6	5.7
Number	3406	579	38	4021

*Chi square significant at .05 level.
**Chi square significant at .001 level.
***Chi square significant at .0001 level.

TABLE 4-3
MEDICAL TREATMENT RECEIVED DURING 1985/1986 BY HOUSEHOLD INCOME (ALL HOUSEHOLDS)

Medical Treatment	Percentage of Households in Income Group							
	$0-3999	$4000-6999	$7000-9999	$10000-14999	$15000-19999	$20000 29999	$30000 +	All
Hospitalization*	25.2	35.1	38.9	36.2	29.3	28.7	28.5	33.1
Outpatient Surgery/ER Services	19.3	24.2	26.7	24.1	21.3	25.3	24.0	23.9
Outpatient Treatment	4.1	7.3	6.5	9.8	5.7	8.2	6.0	7.1
Felt Need For Hospitalization**	14.4	9.0	8.6	4.7	2.4	1.8	1.0	6.5
Number	267	782	505	524	306	284	315	2982

*Chi square significant at .001 level.
**Chi square significant at .0001 level.

Medical treatment differed by race and by income. Because of the small number of households in the "Other" ethnic category, the findings from this subsample may not fully represent the larger population. Consequently, discussion of findings about racial and ethnic groups will be limited to black and white elders throughout the report. White elders were more likely to be hospitalized or have outpatient surgery than black elders. Black elders who were not hospitalized were more likely to feel that they should have been than were white elders. Outpatient treatments did not differ significantly by race.

Elders with household incomes between $4,000 and $14,999 were more likely to be hospitalized than elders with higher incomes, and elders with household incomes below $4,000 were least likely to be hospitalized. The lower the household income, the more likely the elder to feel that they should have been hospitalized when they were not. Outpatient surgery and treatments did not differ significantly by household income.

Summary

One-third of the households studied experienced the hospitalization of an elder during 1985 or early 1986. In almost one-fourth of the households, an elder had outpatient surgery or received emergency room care. Elders in Region II had the highest rate of hospitalization. Elders in Region III had the lowest rate of hospitalization and reported the greatest feeling of unmet need for hospitalization. Black elders had lower rates of hospitalization than white elders. Elders with household incomes under $15,000 had higher rates of hospitalization than elders with higher household incomes, except that elders with household incomes under $4000 had the lowest rates of all.

4.1.2 Out-of-Pocket Medical Expenses

Increasing concern has been directed toward the burden of health spending by individuals on fixed incomes. In 1984, elderly and their families were directly responsible for 25% of all health care spending.

Respondents were asked how much money they paid each month out of their own pocket for medical expenses not covered by their private insurance or Medicare. See Table 4-4 for a breakdown by state and region of average monthly medical expenses.

TABLE 4-4
AVERAGE MONTHLY OUT-OF-POCKET MEDICAL EXPENSES BY STATE AND AAA REGION (ALL RESPONDENTS)

MONTHLY MEDICAL EXPENSE	Percentage of Respondents in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
None	34.9	32.6	32.4	28.2	31.1	32.5	27.9	36.8	32.0
$10 or less	15.7	12.0	16.0	13.5	19.1	12.3	16.5	14.8	15.0
$11 to $25	12.9	13.5	12.0	17.2	11.0	9.7	15.3	11.9	13.0
$26 to $50	16.8	21.6	17.0	21.3	18.2	19.8	18.3	16.2	18.7
$51 to $100	11.4	13.6	15.2	14.9	14.8	17.8	14.1	12.9	14.3
$101 to $200	6.4	4.5	5.9	4.2	5.1	5.8	7.0	5.4	5.5
$201 to $300	.5	.7	.5	.6	.5	1.2	.6	.4	[illegible]
More than $300	1.4	1.5	1.0	.2	.2	.9	.4	1.6	.5
Number	361	372	404	377	353	297	335	326	2829

Almost one-third of the respondents report no out-of-pocket medical expenses. Just over one-fourth pay less than $25 a month out-of-pocket for medical expenses, almost one-fifth pay $26 to $50 a month, and another one-fifth pay more than $50. Approximately one percent indicate that they have monthly out-of-pocket medical expenses of more than $300. The average monthly out-of-pocket medical expense for all respondents is approximately $38.94. Expenses differ significantly by region of residence and range from a high of $42.16 per month in Region VI to a low of $35.55 per month in Region V.

Table 4-5 provides a breakdown of average monthly medical expenses by race, and Table 4-6 provides a breakdown of average monthly medical expenses by household income.

TABLE 4-5
AVERAGE MONTHLY OUT-OF-POCKET MEDICAL EXPENSES BY RACIAL/ETHNIC GROUP (ALL RESPONDENTS)

Monthly Medical Expense*	% of Respondents in Racial/Ethnic Group			
	White	Black	Other	All
None	32.7	27.6	37.9	32.1
$10 or less	15.4	13.4	12.7	15.1
$11 to $25	12.3	17.5	6.0	13.0
$26 to $50	18.0	21.7	18.4	18.5
$51 to $100	14.0	16.2	11.6	14.3
$101 to $200	5.8	3.6	7.3	5.5
$201 to $300	.7	-	3.0	.6
More than $300	1.0	-	3.0	.9
Number	2418	390	29	2837

*Chi square significant at the .01 level.

TABLE 4-6
AVERAGE MONTHLY OUT-OF-POCKET MEDICAL EXPENSES
BY HOUSEHOLD INCOME
(ALL RESPONDENTS)

Monthly Medical Expense*	Percentage of Respondents in Income Group							
	$0-3999	$4000-6999	$7000-9999	$10000-14999	$15000-19999	$20000 29999	$30000 +	All
None	34.6	29.7	23.8	26.7	33.9	31.5	33.4	29.5
$10 or less	14.3	11.6	11.8	15.5	11.0	16.5	16.1	13.5
$11 to $25	17.5	14.7	13.2	15.2	12.4	13.1	13.6	14.2
$26 to $50	20.4	20.0	23.3	16.9	23.0	19.7	21.2	20.5
$51 to $100	8.9	17.8	16.5	16.2	15.5	14.1	10.6	15.2
$101 to $200	4.3	5.6	8.3	7.8	3.7	2.8	3.1	5.6
$201 to $300	-	.4	1.2	1.1	.5	.4	.3	.6
More than $300	-	.1	1.9	.5	-	1.9	1.6	.8
Number	179	586	405	398	234	224	247	2273

*Chi square significant at the .001 level.

Average monthly out-of-pocket medical expenses differ significantly by race and income. When compared to white respondents, black respondents are less likely to have no out-of-pocket medical expenses and are also less likely to have medical expenses over $100 a month. Average medical expense is approximately $32.12 a month for black elders and $39.55 for white elders.

When compared to other income groups, respondents whose household incomes are between $7,000 and $14,999 are least likely to have no out-of-pocket medical expenses and are most likely to have medical expenses over $100 a month. Respondents with household incomes under $4,000, and those with household incomes of $15,000 or more, are most likely to have no out-of-pocket medical expenses. Although there are statistically significant differences in the out-of-pocket medical expenses of different income groups, the differences follow no consistent pattern, that is, higher income groups do not have consistently lower or higher expenses than lower income groups. Respondents with household incomes between $7,000 and $9,999 have the highest average out-of-pocket expense, $52.65 per month, and respondents with household incomes below $4,000 have the lowest average out-of-pocket expense, $25.35.

Summary

Out-of-pocket medical expenses average approximately $39 for respondent households. On the average, white households spend more out-of-pocket on medical expenses than do black households.

4.1.3 Current Housing

Understanding the housing needs for an increasingly elderly population is also a vital part of a planning process. A separate, more in-depth housing study is currently underway as part of this project, and a more detailed report on those findings will be produced later in the year. Several questions were included, however, on this base-line document. Respondents were asked the type of housing they live in and whether they own, rent, or have some other financial arrangement. If they rent, they were asked whether their rent is reduced because of age, disability, or income needs. Respondents were also asked whether their home is in a retirement community or a senior citizen housing project and whether it needs any major repairs. See Table 4-7 for a breakdown of current housing situation by state and region.

TABLE 4-7
CURRENT HOUSING SITUATION BY STATE AND AAA REGION
(ALL HOUSEHOLDS)

HOUSING SITUATION	Percentage of Househsholds in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
Type of Housing*									
House	91.8	91.2	91.6	94.8	90.5	90.8	93.5	92.2	92.1
Apartment/ Duplex	2.6	3.7	5.3	1.4	5.5	3.7	3.2	4.8	3.8
Mobile Home	4.4	4.9	2.5	3.3	3.0	5.1	3.0	2.3	3.5
Condominium	.8	-	.2	-	.3	.4	-	.2	.2
Boarding/ Group Home	.2	-	-	.1	-	-	.2	.2	.1
Other	.2	.2	.4	.3	.8	-	.2	.3	.3
Financial Arrangement**									
Own	92.7	88.8	83.1	90.1	87.4	90.6	90.2	92.0	89.3
Rent	5.2	9.2	13.0	5.4	9.3	7.3	6.1	6.3	7.8
Other	2.0	2.1	3.9	4.5	3.3	2.1	3.8	1.7	3.0
Retirement Community**	10.3	8.5	4.8	3.5	5.6	7.5	3.2	3.9	5.9
Major Repairs Needed	19.3	21.8	25.1	23.1	19.7	19.6	23.3	22.7	21.9
Number	488	505	537	540	527	448	499	465	4009

*Chi square significant at the .05 level
**Chi square significant at the .0001 level

Over 90% of the respondents live in houses. Just under 4% live in apartments or duplexes, and another 3.5% live in mobile homes. Almost 90% of the respondents own or are buying their homes, 7.8% rent their homes, and 3% have other financial arrangements for housing, such as living in the home of a family member. Less than 6% of the respondents live in a retirement community or senior citizen's housing. More than a fifth of the respondents' homes are in need of major repair.

There are statistically significant relationships between region of residence and the type of housing respondents live in, the financial arrangments they have to pay for housing, and the probability that they live in a retirement community or senior citizen's housing. Need for major repairs is not signficantly related to region, however.

The region with the largest percentage of respondents who live in houses, and the smallest percentage who live in apartments or duplexes, is Region IV. Region IV also has the largest percentage of respondents with financial arrangements for housing other than owning or renting their own homes. The region with the largest percentage of respondents who live in apartments or duplexes, and the smallest percentage who live in houses is Region V, the most urban region. Region VI has the largest percentage of respondents who live in mobile homes, and Region VIII has the smallest percentage. Region I has the largest percentage of respondents who live in retirement communities (over 10%) and the largest percentage who live in condominiums, but the latter is still less than 1%. Region I also has the largest percentage of respondents who own or are buying their own home and the smallest percentage who rent. Region III has the largest percentage of respondents who rent and the smallest percentage who own their own home. They also have the largest percentage of need for major repairs.

Of the respondents who rent, 35.1% have their rent subsidized because of age, disability, or income needs. There is no statistically significant relationship between rent reduction and region of residence.

Table 4-8 provides a breakdown of current housing situation by race, and Table 4-9 provides a breakdown of current housing situation by household income.

TABLE 4-8
CURRENT HOUSING SITUATION BY RACIAL/ETHNIC GROUP
(ALL HOUSEHOLDS)

Housing Situation	% of Households in Racial/Ethnic Group			
	White	Black	Other	All
Type of Housing				
House	91.7	94.0	89.7	92.1
Apartment/ Duplex	3.7	4.1	6.8	3.8
Mobile Home	3.9	1.7	3.4	3.6
Condominium	.2	.1	-	.2
Boarding/ Group Home	.1	-	-	.1
Other	.3	-	-	.3
Financial Arrangement**				
Own	90.6	82.2	80.2	89.3
Rent	6.9	12.1	16.4	7.7
Other	2.5	5.7	3.4	3.0
Retirement Community*	6.0	4.5	15.6	5.9
Major Repairs Needed**	19.1	37.8	28.8	21.9
Number	3407	579	38	4023

*Chi square significant at the .05 level
**Chi square significant at the .0001 level

TABLE 4-9
CURRENT HOUSING SITUATION BY HOUSEHOLD INCOME (ALL HOUSEHOLDS)

Housing Situation	Percentage of Households in Income Group							
	$0-3999	$4000-6999	$7000-9999	$10000-14999	$15000-19999	$20000 29999	$30000 +	All
Type of Housing*								
House	86.6	87.0	91.3	93.1	96.2	95.5	96.2	91.5
Apartment/ Duplex	6.2	7.5	3.3	2.9	1.5	1.2	1.9	4.1
Mobile Home	6.2	4.9	4.9	3.7	2.1	2.3	1.1	3.9
Condominium	.3	.1	-	.2	.3	.8	.8	.3
Boarding/ Group Home	-	.2	-	-	-	-	-	.1
Other	.6	.3	.5	.2	-	.3	-	.3
Financial Arrangement*								
Own	74.3	81.5	86.9	92.2	94.7	97.1	96.5	88.1
Rent	13.5	14.6	10.6	6.2	4.3	2.1	2.1	8.8
Other	12.2	4.0	2.5	1.6	1.1	.7	1.4	3.2
Retirement Community	5.0	7.9	4.7	5.6	4.2	5.1	4.5	5.7
Major Repairs Needed*	37.7	34.4	33.0	17.5	12.9	12.0	4.8	24.0
Number	267	782	505	525	306	284	315	2983

*Chi square significant at the .0001 level

Type of housing does not differ significantly by race but does by household income. Elders with higher incomes are more likely to live in houses or condominiums than are elders with lower incomes. Elders with lower incomes are more likely to live in apartments, duplexes, and mobile homes than are elders with higher incomes.

Financial arrangements differ significantly by both race and income. White elders are more likely to own their homes than black elders, and black elders are more likely to rent or have other financial arrangements than white elders. Elders with higher incomes are more likely to own their homes than elders with lower incomes, and elders with lower incomes are more likely to rent or have other financial arrangments than elders with higher incomes.

Likelihood of living in a retirement community differs significantly by race but not by income. When comparing white and black elders, whites are more likely to live in retirement communities.

Percentage of homes needing major repairs differs significantly by both race and household income. Black elders are more likely to live in housing needing major repairs, and white elders are less likely to live in housing needing major repairs. The lower the household income, the more likely the elder to live in a house needing major repairs.

The percentage of elders whose rent is reduced because of age, disability, or financial needs does not differ significantly by race but does differ significantly by household income. Almost 85% of those with subsized rent have household incomes below $7000, and the other 15% with subsidized rent have household incomes below $15,000.

Summary

The great majority of elders in Arkansas live in houses and own their own homes. A higher percentage of elders rent in Region III than in other regions, and a higher percentage of black elders rent than do white elders. As would be expected a higher percentage of lower income elders rent than do higher income elders. A larger percentage of black elders live in housing needing major repairs than do white elders, and, again as would be expected, the lower the household income, the greater the

need for major repairs. Finally, a larger proportion of elders live in retirement communities in Region I than in other regions.

4.1.4 Primary Means of Transportation

The availability of transportation plays a major role in determining access to needed services and in maintaining contact with family and friends to avoid isolation. To identify areas where potential barriers might exist, respondents were asked the primary means of transportation for the elders in their household. See Table 4-10 for a breakdown by state and region of primary means of transportation for household elders.

TABLE 4-10
PRIMARY MEANS OF TRANSPORTATION BY STATE AND AAA REGION
(ALL HOUSEHOLDS)

Primary Means of Transportation*	Percentage of Households in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
Household Member Drives	83.1	82.7	76.0	77.6	80.4	81.4	78.9	84.7	80.5
Friends/Family Drive	12.0	15.6	18.2	16.9	14.1	15.3	17.6	12.3	15.3
Special Transportation	2.5	.7	.8	1.2	1.3	.8	1.1	1.1	1.2
Public Transportation	1.1	-	1.5	1.7	2.4	1.0	.5	.2	1.1
Walking	.4	.5	2.4	1.7	1.1	1.4	.8	.2	1.1
Other	.9	.4	1.0	.8	.6	.2	1.0	1.5	.8
Number	481	504	535	540	523	445	494	461	3984

*Chi square significant at the .001 level.

The major means of transportation for all elders is private automobile driven by self or a member of their own household (80.5%). Private automobile driven by a friend or family member outside their household ranks second (15.3%). Approximately 1% of elders depend on each of the remaining forms of transportation.

Means of transportation differs significantly by region of residence. Region III has the greatest percentage of elders depending on people outside their household for transportation. Regions VIII and I have the lowest. Region V has the greatest dependence on public transportation, and Region II the lowest. Region I has the highest dependence on special transportation (senior citizen's or church van or bus, etc.), and Region II has the lowest. Region III has the highest dependence on walking, and Region VIII the lowest.

Region VIII elders' higher reliance on personal transportation and lower reliance on walking, public transportation, and outside family or friends is consistent with their profile as a relatively younger, higher income group. Region III's higher reliance on walking and outside family or friends is consistent with their lower income. Region V's higher rate of usage of public transportation is no doubt due to the relatively greater urbanization of the area, and Region I's greater reliance on special transportation may simply reflect availability of the service as an option.

Table 4-11 provides a breakdown of means of transportation by race, and Table 4-12 provides a breakdown of means of transportation by household income.

TABLE 4-11
PRIMARY MEANS OF TRANSPORTATION BY RACIAL/ETHNIC GROUP (ALL HOUSEHOLDS)

Primary Means of Transportation*	% of Households in Racial/Ethnic Group			
	White	Black	Other	All
Household Member Drives	84.3	57.6	84.6	80.4
Friends/Family Drive	12.7	31.6	5.7	15.4
Special Transportation	1.0	2.3	2.3	1.2
Public Transportation	.6	4.3	-	1.1
Walking	.6	3.9	2.3	1.1
Other	.8	.3	5.1	.8
Number	3389	575	38	4001

*Chi square significant at the .0001 level.

TABLE 4-12
PRIMARY MEANS OF TRANSPORTATION BY HOUSEHOLD INCOME (ALL HOUSEHOLDS)

Primary Means of Transportation*	Percentage of Households in Income Group							
	$0-3999	$4000-6999	$7000-9999	$10000-14999	$15000-19999	$20000 29999	$30000 +	All
Household Member Drives	50.9	56.2	81.7	93.9	96.6	96.6	99.5	79.2
Friends/Family Drive	34.9	35.3	16.0	4.9	3.1	2.2	.5	16.5
Special Transportation	3.7	3.4	.5	.2	-	.8	-	1.4
Public Transportation	2.9	2.5	.7	1.1	-	-	-	1.2
Walking	5.2	2.1	1.0	-	.3	-	-	1.2
Other	2.3	.6	.2	-	-	.5	-	.4
Number	265	779	502	522	302	283	314	2969

*Chi square significant at the .0001 level.

Primary means of transportation differs significantly by both race and income. Black elders are more likely to rely on friends or family members outside their household, public transportation, walking, or special transportation for getting about than are white elders. White elders are much more likely to rely on themselves or a member of their own household to drive than are black elders. The lower the household income, the more likely the elders to be dependent on friends or family members outside their household, walking, special transportation, or public transportation to get about. The higher the household income, the more likely the elder to rely on self or a member of their own household to drive.

Summary

The primary means of transportation for the great majority of elders in Arkansas is a private automobile driven by self or a member of their own household. Compared to other regions, a higher percentage of elders in Region III depend on family or friends outside their household or on walking, a higher percentage of elders in Region I depend on special transportation, and a higher percentage of elders in Region V depend on public transportation. Black elders are more likely to depend on transportation resources outside their own home than are white elders, and lower income elders are more likely to depend on transportation resources outside their own home than are higher income elders.

4.1.5 Commodities and Services Needed

Respondents were asked a number of questions about current and potential needs of elders in their household. The following needs were identified for the household as a whole: (1) financial assistance, (2) physician's services, (3) new housing arrangement within the next two to three years, and (4) employment.

4.1.5.1 Financial Assistance

Respondents were asked whether they or other elders in their household had enough money to get by on each month and whether they had any difficulty affording their rent or house payment, utilities, medical or pharmacy bills, and/or groceries. See Table 4-13 for percentage of households reporting financial needs by state and region.

TABLE 4-13
NEED FOR FINANCIAL ASSISTANCE BY STATE AND AAA REGION (ALL HOUSEHOLDS)

Need	Percentage of Households in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
Financial Assistance***									
Yes	6.8	10.1	18.9	17.5	10.2	7.3	13.9	8.3	11.8
Sometimes	9.0	8.8	9.8	10.7	12.3	10.5	12.5	7.4	10.2
Money For Utility Bills**	9.8	15.2	16.5	20.8	15.4	13.6	14.8	11.1	14.8
Money For Medical/Pharmacy Bills***	7.5	11.2	14.6	16.5	11.0	12.6	15.1	8.5	12.3
Money For Grocery Bills*	6.4	6.0	8.9	9.6	8.7	5.2	9.7	5.1	7.5
Money For Rent/ House Payment	2.2	3.6	5.0	4.2	3.6	2.1	3.5	1.7	3.3
Number	485	505	536	537	526	447	496	463	3996

*Chi square significant at the .01 level
**Chi square significant at the .001 level
***Chi square significant at the .0001 level

Approximately 12% of respondents indicate that they do not have enough money to meet their needs. Another 10% indicate that they **sometimes** do not have enough money to meet their needs. Specifically, approximately 15% of the respondents indicate that they have difficulty affording their utility bills, 12% have difficulty affording their medical or pharmacy bills, almost 8% have difficulty affording their grocery bills, and just over 3% have difficulty affording their rent or house payment.

There are statistically significant relationships between region of residence and need for financial assistance, for money to pay utility bills, for money to pay medical or pharmacy bills, and for money to pay grocery bills. Region III respondents indicate the highest need for financial assistance, and Regions I and VIII the lowest. Region IV respondents indicate the most difficulty affording their utility and medical bills, and Region [illegible] the least difficulty. Region IV and VII respondents report the most difficulty affording their groceries, and Regions VI and VIII the least.

Table 4-14 provides a breakdown of financial needs by race, and Table 4-15 provides a breakdown of financial needs by household income.

TABLE 4-14
NEED FOR FINANCIAL ASSISTANCE BY RACIAL/ETHNIC GROUP
(ALL HOUSEHOLDS)

	% of Households in Racial/Ethnic Group			
Need	White	Black	Other	All
Financial Assistance*				
Yes	8.4	31.7	20.9	11.9
Sometimes	8.3	20.5	16.3	10.2
Money For Utility Bills*	12.0	30.6	21.9	14.9
Money For Medical/Pharmacy Bills*	10.1	24.6	13.4	12.3
Money For Grocery Bills*	5.9	17.4	2.4	7.6
Money For Rent/House Payment*	2.6	7.5	4.6	3.3
Number	3396	576	38	4011

*Chi square significant at the .0001 level.

TABLE 4-15
NEED FOR FINANCIAL ASSISTANCE BY HOUSEHOLD INCOME
(ALL HOUSEHOLDS)

	Percentage of Households in Income Group							
Need	$0-3999	$4000-6999	$7000-9999	$10000-14999	$15000-19999	$20000 29999	$30000 +	All
Financial Assistance*								
Yes	30.9	23.5	14.0	7.7	5.6	2.9	2.4	13.7
Sometimes	13.4	19.7	15.1	5.8	4.9	3.8	.4	10.9
Money For Utility Bills*	32.7	29.7	19.6	9.1	7.8	5.7	1.6	17.2
Money For Medical/Pharmacy Bills*	25.1	22.1	20.2	8.4	4.8	4.2	.8	13.9
Money For Grocery Bills*	24.4	15.6	9.6	3.9	2.0	.8	.3	8.9
Money For Rent/House Payment*	7.6	5.8	4.7	1.7	2.5	.9	.3	3.7
Number	267	782	502	524	306	284	315	2980

*Chi square significant at the .0001 level.

All categories of financial assistance needed differ significantly by both race and income. For all categories, black elders report higher needs than white elders. As would be expected, there is an inverse relationship between household income and financial need.

Summary

As would be expected, the lower a household's income, the greater the need for financial assistance. A greater proportion of black elders need financial assistance than do white elders. The greatest difficulty in getting by financially is reported by elders in Region III, although elders in IV report the greatest level of difficulty in paying utility and medical bills, and elders in Region VII report the greatest level of difficulty in paying grocery bills.

4.1.5.2 Physician Services

Respondents were asked whether any elder in their household had had difficulty obtaining the services of a doctor. If so, respondents were further asked the reasons for the difficulty. See Table 4-16 for a breakdown of rate of difficulty and reasons by state and region. In reviewing reasons for difficulty in obtaining physician services, the reader is cautioned to remember that small numbers in individual cells increase the error rate for each region. Data for the state as a whole are somewhat more reliable.

TABLE 4-16
DIFFICULTY OBTAINING PHYSICIAN SERVICES BY STATE AND AAA REGION (ALL HOUSEHOLDS)

Physician Services	Percentage of Households in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
Difficulty Obtaining*	1.4	2.4	3.4	2.5	2.5	1.9	4.9	3.0	2.8
Number	487	504	535	539	525	444	497	463	3993
Reason for Difficulty									
Lack of money*	25.0	54.5	75.0	40.5	31.3	16.7	41.8	19.2	42.1
Lack of transportation	-	9.1	15.6	19.2	12.5	16.7	19.1	23.1	15.9
Appointment not available	33.3	18.2	-	13.4	-	-	19.6	19.2	13.1
No physician in area	-	-	-	13.4	-	41.7	7.3	11.5	7.8
Won't take Medicare/ Medicaid	-	-	9.4	-	25.0	-	-	7.7	4.8
Other	41.7	18.2	-	13.4	31.3	25.0	12.2	19.2	16.3
Number	5	9	14	12	7	5	17	11	80

*Chi square significant at the .05 level.

Just under 3% have had difficulty obtaining the services of a physician. Rate of difficulty differs significantly by region of residence. Region I reports the lowest rate of difficulty and Region VII reports the highest rate of difficulty. The most common reason for difficulty in obtaining the services of a physician is lack of money. Lack of money is also the only reason that is significantly related to region of residence. The region experiencing the most difficulty in obtaining physician services due to lack of money is Region III. See Appendix A for more detailed statistical findings.

Tables 4-17 and 4-18 provide a breakdown of rate of difficulty and reasons for difficulty in obtaining the services of a doctor by race and income, respectively. Again the reader is cautioned about the increased error rate due to the small cell sizes for reasons.

TABLE 4-17
DIFFICULTY OBTAINING PHYSICIAN SERVICES BY RACIAL/ETHNIC GROUP (ALL HOUSEHOLDS)

Physician Services	% of Households in Racial/Ethnic Group			
	White	Black	Other	All
Difficulty Obtaining	2.6	3.6	2.8	2.8
Number	3396	574	38	4008
Reason for Difficulty*				
Lack of money**	36.8	66.3	-	42.1
Lack of transportation***	10.0	33.7	100.0	15.9
Appointment not available	16.6	-	-	13.1
No physician in area	9.9	-	-	7.8
Won't take Medicare/ Medicaid	6.1	-	-	4.8
Other	20.7	-	-	16.3
Number	63	16	1	80

*Chi square significant at the .05 level.
**Chi square significant at the .01 level.
***Chi square significant at the .001 level.

TABLE 4-18
DIFFICULTY OBTAINING PHYSICIAN SERVICES BY HOUSEHOLD INCOME
(ALL HOUSEHOLDS)

	Percentage of Households in Income Group							
Physician Services	$0-3999	$4000-6999	$7000-9999	$10000-14999	$15000-19999	$20000 29999	$30000 +	All
Difficulty Obtaining****	6.8	4.5	3.5	1.9	1.8	.8	-	3.0
Number	267	779	502	524	304	282	314	2972
Reason for Difficulty**								
Lack of money	44.2	60.5	49.1	20.6	-	-	-	42.9
Lack of transportation	39.2	14.9	6.2	11.9	-	-	-	17.0
Appointment not available	8.1	8.3	11.8	28.9	15.5	-	-	12.8
No physician in area	8.6	-	14.9	13.0	-	-	-	7.2
Won't take Medicare/ Medicaid***	-	4.1	-	-	38.8	-	-	4.6
Other*	-	12.2	18.0	25.6	45.7	-	-	15.5
Number	15	20	14	10	6	0	0	65

*Chi square significant at the .05 level.
**Chi square significant at the .01 level.
***Chi square significant at the .001 level.
****Chi square significant at the .0001 level.

Difficulty obtaining the services of a doctor differs significantly by income but not by race. There is an inverse relationship between household income and difficulty obtaining the services of a physician. Reason for difficulty in obtaining the services of a doctor differs significantly by both race and income. Lack of money and lack of transportation effect black elders more than white elders. Lack of money is the primary problem cited by elders whose household incomes are under $10,000. Lack of transportation is also a major factor for those with household incomes under $4000. No elders with household incomes of $20,000 or more reported any problems obtaining the services of a physician.

Summary

Just under 3% of respondents report difficulty obtaining the services of a doctor. Rate of difficulty differs significantly by region of residence and household income. Region I reports the lowest rate of difficulty, and Region VII reports the highest rate. The lower the household income, the higher the rate of difficulty in obtaining services of a physician. Reasons for difficulty differ by region, race, and income. Elders in Region III report a higher level of difficulty in affording the services of a physician than do elders in other regions. Black elders report more difficulty in affording physicians' services, and more difficulty in getting doctor care because of transportation problems, than do white elders. Lack of money and lack of transportation are also the primary reasons lower income elders have difficulty obtaining doctor services.

4.1.5.3 New Housing Arrangement

Respondents were asked whether it was likely that any of the elders in their household would need to move to another housing arrangment during the next two to three years. Those who thought it was very likely or somewhat likely were further asked what kind of arrangement they thought would be needed. See Table 4-19 for a breakdown of need for new housing arrangement by state and region.

TABLE 4-19
NEED FOR NEW HOUSING ARRANGEMENTS WITHIN 2-3 YEARS
BY STATE AND AAA REGION
(ALL HOUSEHOLDS)

Housing Needed	Percentage of Households in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
New Housing Arrangement									
Very likely	5.1	3.9	4.2	3.9	3.1	3.5	3.3	3.7	3.9
Somewhat likely	8.3	6.2	7.1	6.6	7.4	6.8	8.3	7.6	7.3
Not likely	86.5	89.9	88.7	89.5	89.4	89.7	88.4	88.7	88.9
Number	485	502	532	534	522	443	496	463	3977
Type of Housing*									
Smaller Place/ Easier to Care for	43.8	30.6	20.3	12.8	23.7	41.2	28.1	54.3	31.2
Nursing Home	16.1	9.3	9.8	13.0	17.1	15.3	20.5	7.4	13.7
Retirement Home	5.1	14.8	8.9	23.1	15.5	7.1	6.4	8.5	11.2
Move in with Children	10.9	3.7	3.3	18.6	3.3	9.4	16.4	-	8.4
Larger Place	-	8.3	10.6	7.1	7.3	-	2.4	3.2	5.0
No Stairs/ Better Access	-	2.8	1.6	4.1	4.1	4.7	1.6	3.2	2.6
Other	24.1	30.6	45.5	21.3	29.0	22.4	24.6	23.4	27.9
Number	59	46	53	48	51	37	50	40	384

*Chi square significant at the .001 level

Over 7% think it somewhat likely that they will need a new housing arrangement within the next two to three years, and another 4% think it very likely they will need a new arrangement. Need for a new housing arrangement is not significantly related to region.

Almost a third of the respondents who indicate that they will probably need a new housing arrangement are thinking of a smaller place or one that will be easier to care for. A nursing home is the next most likely arrangement to be needed, followed by a retirement home, and then moving in with children. The type of new arrangement needed differs significantly by region of residence.

Region VIII indicates the greatest level of interest in a smaller place and the lowest interest in nursing homes and moving in with children. Region VII indicates the greatest need for nursing homes. Region IV has the highest level of interest in moving to a retirement home and in moving in with one's children. It has the lowest interest in a smaller place to live. Region III has the highest need for larger housing arrangements, and Region VI the highest need for places without stairs or with better access.

Statistical analysis of need for new housing arrangements by race and household income indicates no significant differences in the prevalence of need for new housing types by elders of different racial or income groups.

Summary

Over 11% of respondents predict a need for new housing arrangements within two to three years. The greatest need for new housing arrangements expected by elders

in Arkansas is for smaller places that are easier to care for. This need was predicted by a larger proportion of elders in Region VIII than in other regions. The largest percentage of elders expecting to need nursing home care are in Region VII, and the largest percentages expecting to need retirement homes or to move in with their children are in Region IV.

4.1.5.4 Employment

Respondents were further asked whether any retired elders in the household would be interested in returning to work if an appropriate job were available. If they said yes, respondents were asked whether the elder(s) would prefer part-time rather than full-time work if it were available. See Table 4-20 for the percentage of households in which retired elders desire to return to work broken down by state and region.

TABLE 4-20
EMPLOYMENT PREFERENCES OF RETIRED ELDERS BY STATE AND AAA REGION (ALL HOUSEHOLDS)

Work Preference	Percentage of Households in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
Appropriate Work Desired*									
Yes	18.4	23.3	17.9	16.5	16.5	17.8	18.8	16.0	18.1
Don't Know	3.2	3.3	4.9	3.5	3.3	6.6	1.6	5.7	4.0
No	78.4	73.4	77.2	80.1	80.3	75.6	79.5	78.2	77.9
Number	390	375	395	412	419	351	367	352	3059
Part-time Work Preferred	76.3	76.8	74.8	73.1	71.2	74.1	65.1	68.8	72.4
Number	82	100	87	85	87	81	98	81	701

*Chi square significant at the .05 level

Eighteen percent of the respondents indicate that a retired elder in their household would like to return to work. Almost three-fourths of those say the elder would prefer part-time work. There is a statistically significant relationship between desire to return to work and region of residence, but there is no statistically significant relationship between desire for part-time work and region. Respondents in Region II report a higher proportion of elders desiring to return to work than do respondents in other regions. Statistical analysis of desire to return to work by race and household income indicates no significant difference in desire for employment on the part of retired elders from different racial or income groups.

Summary

Just under one-fifth of the retired elders in Arkansas would like to return to work, and almost three-fourths of them would prefer part-time work. A greater proportion of retired elders would like to return to work in Region II than in other regions.

4.2 Findings for All Elders

Findings for all elders include current assets, current activities, functional problems, health status, medical and social services used or needed, grouped functional impairments or vulnerabilities, and potential need for nursing home care.

4.2.1 Current Assets

Respondents were asked whether any of the elders in the household receive income from eleven specific sources. See Table 4-21 for a breakdown of the percentage of elders receiving income from each source by state and region.

TABLE 4-21
INCOME SOURCES BY STATE AND AAA REGION
(ALL ELDERS)

	Percentage of Elders in Region/State								
INCOME SOURCE	I	II	III	IV	V	VI	VII	VIII	AR
Social Security***	77.4	74.1	70.8	67.0	72.2	73.2	71.9	64.9	71.4
Rent/Property/ Investments/ Savings***	43.5	39.9	35.2	31.9	45.5	58.8	66.1	58.1	60.9
Retirement/VA/ Military Pension**	28.6	24.8	22.9	23.8	32.8	30.0	26.8	28.8	27.2
Employment/ Business**	22.2	27.4	27.6	28.1	23.5	23.5	29.3	31.3	26.6
Supplemental Security Income (SSI)***	7.4	9.8	15.4	12.9	8.8	6.5	9.9	3.4	9.4
Food Stamps***	3.4	5.0	9.5	7.9	4.1	4.7	5.0	2.9	5.4
Disability Benefits	6.2	4.3	4.7	5.3	5.7	4.7	4.0	5.1	5.0
Utility Assistance*	2.5	5.3	5.5	4.4	4.6	4.2	4.4	2.2	4.1
Family Members*	2.5	2.7	3.4	2.7	4.7	2.3	4.6	2.8	3.2
Unemployment Compensation	.2	.7	.2	.6	-	.3	-	.3	.3
AFDC	.4	.1	.1	-	-	.4	.4	-	.2
Number	727	743	748	761	750	645	699	695	5768

*Chi square significant at the .05 level.
**Chi square significant at the .001 level.
***Chi square significant at the .0001 level.

The most common source of income for the elders studied is Social Security, followed by rent/property/investment/savings income. Third most common are retirement benefits, followed by employment or business income. The least most common source of income, as expected, is Aid for Families with Dependent Children (AFDC). All but three sources of income (disabiity benefits, unemployment compensation, and AFDC) are significantly associated with region of residence.

Region I elders depend more on Social Security and disability benefits and less on employment or business income than elders in other regions. Region III has the highest dependence on SSI, food stamps, and utility assistance and the lowest dependence on retirement and pension income. (Region III has the highest proportion of female elders and the lowest mean annual household income of all the regions.) Region IV has the lowest dependence on rent, property, investment, or savings income. Region V elders depend more on retirement income and money from family members than elders in other regions. (Region V has the highest proportion of retired elders.) Region VI has the lowest dependence on family members. (Region VI elders have the highest average annual household income, and Region VI contains major resort and retirement communities.) Region VII reports the highest dependence on rental, property, investment, and savings income. Region VIII elders are more likely to have employment or business income and less likely to have Social Security, SSI, food stamps, and utility assistance than elders in other regions. (Region VIII elders are relatively younger and more likely to be employed than other elders studied.)

Summary

Social Security and income from rent, investments, and savings are the major sources of income for elders in Arkansas. A higher proportion of elders in Region III receive income from SSI, food stamps, and utility assistance than do elders in other regions.

Respondents were also asked what types of health insurance elders in their household carried. See Table 4-22 for the percentage of elders carrying a particular type of insurance by state and region.

TABLE 4-22
HEALTH INSURANCE COVERAGE BY STATE AND AAA REGION
(ALL ELDERS)

Type of Health Insurance	Percentage of Elders in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
None*	6.8	7.2	6.7	8.6	6.3	4.9	6.3	4.9	6.5
Medicare**	65.0	61.3	61.3	58.7	62.1	62.0	61.1	54.0	60.7
Employer/Union Group Plan (non HMO)****	31.5	27.8	22.7	27.8	34.3	31.2	31.0	36.3	30.2
Individual Private Plan (non HMO)	29.3	24.5	30.3	30.2	31.3	29.8	29.2	32.4	29.6
Medicare Supplemental	26.4	27.5	25.0	25.3	29.9	30.3	27.9	25.8	27.2
Military/VA/ CHAMPUS***	13.2	13.4	8.3	9.0	12.0	11.4	7.1	10.0	10.6
Medicaid****	8.4	9.4	14.7	8.9	8.7	6.1	9.8	4.2	8.9
HMO	1.3	.8	.5	.6	1.5	.3	.5	.8	.8
Other*	8.3	10.3	9.9	10.2	10.1	13.3	12.3	13.7	11.0
Number	769	774	792	811	786	674	734	728	6068

*Chi square significant at the .05 level.
**Chi square significant at the .01 level.
***Chi square significant at the .001 level.
****Chi square significant at the .0001 level.

Just over 6% of elders in Arkansas have no health insurance coverage. The most common form of health insurance coverage is Medicare. Just over a third of the elders studied have an employer or union group plan, and just under a third have an individual private plan. Approximately one-fourth of the elders studied carry Medicare supplemental insurance. The least common form of health insurance coverage is membership in a health maintenance organization (HMO). Coverage by Medicare, by an employer or union group plan, by the military, Veteran's Administration, or CHAMPUS, and by Medicaid are all significantly related to region of residence. Lack of health insurance is also significantly related to region.

A larger proportion of elders in Region I have Medicare coverage than do elders in other regions. Region II has the highest percentage of elders with military, VA, or CHAMPUS coverage and the lowest percentage with an individual private plan. Region III has the largest proportion of elders with Medicaid coverage and the smallest proportion of elders with an employer or union group plan or a Medicare supplemental plan. Region III's higher rate of Medicaid coverage fits with their profile as the group with the lowest average annual household income. Region IV has the highest proportion of elders without insurance coverage. Region V reports the highest membership in HMOs, but the differences between regions are not statistically significant. Region VI has the highest Medicare supplemental insurance coverage. Region VII has the lowest military, VA, and CHAMPUS coverage. Region VIII elders are more likely than elders in other regions to have an employer or union group plan, and/or an individual private plan, and are less likely to have Medicare or Medicaid. This profile is consistent with

Region VIII's relatively younger, more employed composition.

Summary

Over 6% of elders in Arkansas report having no health insurance coverage. Medicare is the primary source of medical insurance for those elders who do. A higher proportion of elders in Region III have Medicaid coverage than do elders in other regions.

4.2.2 Current Activities

Respondents were asked about the participation of household elders in nine activities: senior centers, social/civic/advocacy groups, church/synagogue, physical exercise, continuing education, television/reading, travel, theater/restaurants, and visits in friends' homes. In an effort to address issues of involvement and isolation, activities involving interaction with others were included, as well as solitary activities. Both active and passive activities were included, and in-home and outside activities. See Table 4-23 for a breakdown by state and region of the percentage of elders participating in various activities.

TABLE 4-23
PARTICIPATION IN ACTIVITIES BY STATE AND REGION
(ALL ELDERS)

ACTIVITY	Percentage of Elders in Region/State I	II	III	IV	V	VI	VII	VIII	AR
TV/READING**	92.8	96.4	94.2	95.2	94.4	96.7	94.6	97.0	95.1
CHURCH/ SYNAGOGUE****	65.2	75.6	77.7	82.1	75.9	78.8	82.9	75.7	76.7
VISITING FRIENDS**	76.3	78.6	72.8	74.8	76.3	76.2	76.5	82.5	76.7
THEATER/ RESTAURANTS****	67.3	61.8	58.7	53.4	68.7	65.6	55.3	68.1	62.2
PHYS. EXER.****	50.6	51.1	44.2	40.7	50.9	55.7	49.9	54.1	49.4
TRAVEL***	45.8	45.6	40.1	40.1	46.0	47.0	39.8	50.1	44.2
SOCIAL GROUPS*	23.3	23.2	21.1	22.8	26.9	26.1	19.1	23.6	23.2
SR. CENTERS**	12.6	10.9	8.8	8.2	13.4	11.1	9.1	13.4	10.9
CONT. EDUC.**	4.0	3.6	4.7	3.5	4.8	4.5	2.9	7.4	4.4
Number	769	774	792	811	786	674	734	728	6068

*Chi square significant at the .05 level.
**Chi square significant at the .01 level.
***Chi square significant at the .001 level.
****Chi square significant at the .0001 level.

Watching television and reading are the most common activities, with 95% of all elders in the state participating. Attendance at a church or synagogue and visiting friends in their homes rank second, with three-fourths of all elders participating. The least engaged in activity is continuing education, with only 4.4% of all elders participating. Senior centers rank second-to-last, with 10.9% of elders participating. Participation levels differ significantly by region for all activities.

Region I ranks lowest in church/synagogue attendance and television viewing/reading, and it ranks relatively high on visits to theaters and restaurants. Compared to the state mean, elders in Region I are more likely to be white, have some college education, and have higher incomes.

Region II was near the state norm in all areas of activity participation.

Region III ranks relatively low on participation in physical exercise, visits to friends, travel, theaters and restaurants, senior centers, and social groups. Compared to the state mean, Region III elders are more likely to have less than a high school education, to have lower incomes, and to be unable to work for health reasons or to be employed full-time.

Region IV is above the state average in church or synagogue attendance and below average in physical exercise, visits to theaters and restaurants, traveling, and visits to senior centers. Compared to the state mean, Region IV elders are more likely to be black, to have less than a high school education, and to be unable to work for health reasons.

Region V is above the state average in visits to theaters and restaurants and senior centers and in participation in social, civic, or advocacy groups. Region V includes the major metropolitan area of Little Rock as well as several other cities, and, compared to the state mean, Region V elders are more likely to be retired and have more education and higher incomes.

Region VI is above the state average in physical exercise, visits to theaters and restaurants, participation in social groups, and travel. Region VI contains the major resort/retirement area of

Hot Springs, and, compared to the state mean, Region VI elders are more likely to have higher incomes and at least a high school education.

Region VII is above the state average in church and synagogue attendance and below average in visits to theaters and restaurants, travel, and participation in social groups and continuing education. Compared to the state mean, Region VII elders are more likely to be black, to be older, and to have lower incomes.

Region VIII is above the state average in visits to theaters and restaurants and friends' homes, travel, physical exercise, participation in social groups and senior centers, and television viewing/reading. Region VIII contains the city of Fort Smith, and, compared to the state mean, Region VIII elders are more likely to be white, relatively young, and employed full-time, and to have higher incomes.

Tables 4-24 to 4-26 provide breakdowns of the percentage of elders participating in different activities by sex, race, and age.

TABLE 4-24
PARTICIPATION IN ACTIVITIES BY SEX
(ALL ELDERS)

ACTIVITY	% of Elders in Sex Type MALE	FEMALE	ALL
TELEVISION/READING*	94.0	95.9	95.1
CHURCH/SYNAGOGUE**	71.0	80.5	76.7
VISITING FRIENDS	75.4	77.6	76.7
THEATER/RESTAURANTS	62.7	61.9	62.2
PHYSICAL EXERCISE*	52.5	47.4	49.5
TRAVEL	45.1	43.8	44.3
SOCIAL GROUPS*	20.8	24.8	23.2
SENIOR CENTERS**	7.7	13.1	10.9
CONTINUING EDUCATION	4.2	4.6	4.4
Number	2434	3658	6093

*Chi square significant at the .001 level.
**Chi square significant at the .0001 level.

TABLE 4-25
PARTICIPATION IN ACTIVITIES BY RACIAL/ETHNIC GROUP
(ALL ELDERS)

Activity	% of Elders in Racial/Ethnic Group White	Black	Other	All
TELEVISION/READING*	95.6	92.4	89.7	95.2
CHURCH/SYNAGOGUE*	75.4	85.6	69.0	76.7
VISITING FRIENDS*	78.3	67.5	73.5	76.8
THEATER/RESTAURANTS*	66.7	33.5	61.8	62.2
PHYSICAL EXERCISE*	52.6	29.6	49.9	49.5
TRAVEL*	46.8	28.2	41.6	44.3
SOCIAL GROUPS*	24.7	14.0	16.6	23.2
SENIOR CENTERS	10.6	12.9	14.0	11.0
CONTINUING EDUCATION	4.6	3.0	3.6	4.4
Number	5220	808	59	6087

*Chi square significant at the .0001 level.

TABLE 4-26
PARTICIPATION IN ACTIVITIES BY AGE COHORT
(ALL ELDERS)

	PERCENTAGE OF ELDERS IN AGE COHORT							
ACTIVITY	55-59	60-64	65-69	70-74	75-79	80-84	85+	ALL
TV/READING*	96.4	95.7	95.2	96.3	94.4	92.8	89.1	95.1
CHURCH/ SYNAGOGUE*	77.0	75.4	78.1	81.7	77.8	72.9	61.8	76.7
VISITING FRIENDS*	78.2	80.3	81.4	79.9	73.3	65.2	51.0	76.7
THEATER/ RESTAURANTS*	73.8	67.8	66.0	60.7	52.9	44.3	32.8	62.2
PHYS. EXER.*	55.5	55.2	52.2	49.5	42.6	34.8	28.1	49.5
TRAVEL*	51.9	51.5	51.1	42.4	34.0	25.7	17.3	44.3
SOCIAL GROUPS*	17.7	21.9	29.4	27.1	25.0	20.1	15.1	23.2
SR. CENTERS*	2.9	6.6	12.7	14.4	17.4	17.1	18.0	10.9
CONT. EDUC.*	8.3	6.3	3.6	2.5	2.0	.7	1.4	4.4
Number	1115	1432	1016	1030	763	470	266	6093

*Chi square significant at the .0001 level.

Prevalences of watching television or reading, attending church or synagogue, physical exercise, belonging to social groups, and attending senior center programs differ significantly by sex, with female elders having higher participation levels in all the activities except physical exercise.

Prevalences of watching television or reading, attending a church or synagogue, visiting friends, going to the theater or restaurants, physical exercise, travel, and belonging to social groups differ significantly by race, with white elders reporting higher participation levels than black elders in all the activities except attending a church or synagogue.

Participation levels for all activities also differ significantly by age. The older the elder the less likely he or she is to participate in television viewing or reading, going to theaters or restaurants, physical exercise, travel, and continuing education. Older elders are more likely, however, to attend senior centers. Participation in other activities tends to peak around 65 to 69 (visiting friends and membership in social groups) or 70 to 74 (church or synagogue attendance), increasing until that time and decreasing thereafter.

Summary

Watching television or reading is the most common activity of elders in Arkansas. Participation in watching television or reading, visiting friends, travel, and continuing education is highest in Region VIII. Visits to theaters and restaurants and participation in social groups is highest in Region V. Attendance at a church or synagogue is highest for Region VII, and a greater proportion of elders participate in physical exercise in Region VI. The highest rates of participation in senior centers are found in Regions V and VIII. The only activity in which men are significantly more involved than women is physical exercise, and the only activity in which black elders are significantly more involved than white elders is church attendance. The only activity that continues to increase with age is participation in senior centers.

4.2.3 Functional Problems

The ability to perform certain activities of personal and self care is a critical component of an elder's ability to remain in a community. As inability to perform certain activities of daily living (ADLs) increases, so does the likelihood of transfer from the community to an institutional setting. For the purposes of this study, 17 ADL limitations were surveyed: difficulty doing light housework, cooking, feeding self, dressing/grooming, bathing/shampooing, heavy cleaning/yardwork, balancing a checkbook/business affairs, shopping, taking medication in the right amount at the right time, using a toilet, bowel/bladder accidents, using a telephone, laundry, walking, getting places outside walking distance, writing, and reading. These variables were selected to be comparable to several national studies where validity has already been established.

4.2.3.1 Prevalence of Difficulty with ADLs

Respondents were first asked whether elders had difficulty with each activity of daily living. See Table 4-27 for a breakdown by state and region of prevalence levels of difficulty with ADLs. Findings are presented in descending order of prevalence. This ranking does not imply any suggestion of seriousness or importance for different problems.

TABLE 4-27
PREVALENCE OF DIFFICULTY WITH ACTIVITIES OF DAILY LIVING BY STATE AND AAA REGION
(ALL ELDERS)

ACTIVITY OF DAILY LIVING	Percentage of Elders in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
HEAVY CLEANING/ YARDWORK***	29.2	32.7	38.0	32.6	36.0	31.7	30.2	25.2	32.0
LIGHT HSEWORK	15.5	13.6	16.0	16.0	15.8	15.7	18.2	11.9	15.4
WALKING**	11.9	11.7	16.3	13.3	13.5	11.2	13.1	9.1	12.6
SHOPPING	8.5	8.4	9.1	9.1	8.1	8.4	10.1	7.3	8.6
READING***	6.7	6.8	12.1	8.2	9.0	6.9	7.5	5.0	7.8
WRITING***	5.3	6.4	11.6	7.5	7.9	6.3	7.7	5.1	7.3
COOKING**	4.8	5.6	9.5	8.0	8.2	7.0	7.8	5.1	7.0
GETTING PLACES**	6.1	5.6	9.3	7.3	5.4	8.0	5.7	4.8	6.6
DOING LAUNDRY	5.6	5.1	7.7	5.5	7.2	6.8	7.1	4.4	6.2
BUS. AFFAIRS*	5.6	5.0	8.1	7.0	6.7	6.1	6.5	3.9	6.1
BATHE/SHAMPOO**	5.3	4.0	7.2	6.8	5.8	6.2	7.3	3.6	5.8
BOWEL/BLADDER ACCIDENTS	6.0	5.2	6.5	6.7	5.7	5.9	5.5	3.8	5.7
DRESS/GROOMING*	2.8	2.9	4.3	4.8	3.8	4.7	5.4	2.3	3.9
TAKE MEDICINE**	4.7	3.4	4.3	4.4	3.5	1.9	3.2	1.8	3.5
USING TELEPHONE	2.4	3.0	3.1	3.3	2.0	2.2	2.7	2.0	2.6
USING TOILET	1.5	1.8	2.2	2.6	3.4	2.3	3.4	1.7	2.4
FEEDING SELF	.6	.7	1.1	1.5	1.1	1.0	1.4	.8	1.0
Number	769	774	792	811	786	674	734	728	6068

*Chi square significant at the .05 level.
**Chi square significant at the .01 level.
***Chi square significant at the .0001 level.

The area of difficulty for most elders is heavy cleaning and yardwork, with 32.0% of all elders reporting problems. Next most likely to cause difficulty are doing light housework (15.4%) and walking (12.6%). The least cited problems are feeding self (1.0%), using the toilet (2.4%), and using the telephone (2.6%). Difficulty with cooking, dressing and grooming, bathing and shampooing, heavy cleaning and yardwork, handling business affairs, taking medication in the right amount at the right time, walking, getting places outside walking distance, writing, and reading differ significantly by region. The remaining seven activities of daily living do not differ significantly by region.

Region III elders report the greatest level of difficulty with activities of daily living in general. They record the greatest percentage of difficulty with heavy cleaning and yardwork, walking, reading, writing, cooking, getting places outside of walking distance, doing laundry, and handling business affairs. Compared to the state mean, Region III elders are more likely to have less than a high school education, to have lower incomes, to be widowed, and to be unable to work because of poor health.

Region VIII elders report the lowest level of difficulty with activities of daily living. They record the lowest percentage of difficulty with every activity except cooking, using a toilet, and feeding oneself, and they were either second or third lowest in difficulty in them. Compared to the state mean, Region VIII elders are younger and have higher incomes.

Region VII reports the most difficulty with light housework, shopping, bathing/shampooing, dressing/grooming, and using a toilet. Region VII elders are older on the average than elders in other regions. Elders in other regions score near the state mean on difficulty with ADLs.

Tables 28 to 31 provide breakdowns of difficulty with activities of daily living by sex, race, age, and income, respectively.

TABLE 4-28
PREVALENCE OF DIFFICULTY WITH ACTIVITIES OF DAILY LIVING BY SEX
(ALL ELDERS)

	% ELDERS IN SEX TYPE		
ACTIVITY OF DAILY LIVING	MALE	FEMALE	ALL
HEAVY CLEANING/YARDWORK****	24.4	37.1	32.0
LIGHT HOUSEWORK****	9.4	19.2	15.3
WALKING***	10.6	13.9	12.6
SHOPPING****	5.5	10.7	8.6
READING**	6.5	8.7	7.8
WRITING***	5.8	8.3	7.3
COOKING***	5.5	8.1	7.0
GETTING PLACES****	4.6	7.9	6.6
DOING LAUNDRY***	4.9	7.1	6.2
BUSINESS AFFAIRS****	4.2	7.4	6.1
BATHING/SHAMPOOING****	4.0	7.0	5.8
BOWEL/BLADDER ACCIDENTS****	4.1	6.8	5.7
DRESSING/GROOMING	3.9	3.9	3.9
TAKING MEDICINE	3.6	3.3	3.4
USING THE TELEPHONE*	3.2	2.3	2.6
USING THE TOILET	2.3	2.4	2.4
FEEDING SELF	1.0	1.0	1.0
Number	2434	3658	6093

*Chi square significant at the .05 level.
**Chi square significant at the .01 level.
***Chi square significant at the .001 level.
****Chi square significant at the .0001 level.

TABLE 4-29
PREVALENCE OF DIFFICULTY WITH ACTIVITIES OF DAILY LIVING BY RACIAL/ETHNIC GROUP
(ALL ELDERS)

	% of Elders in Racial/Ethnic Group			
Activity of Daily Living	White	Black	Other	All
HEAVY CLEANING/YARDWORK***	29.7	47.5	30.3	32.1
LIGHT HOUSEWORK***	13.4	26.2	34.9	15.3
WALKING***	11.1	21.2	24.7	12.6
SHOPPING***	7.4	16.6	10.2	8.6
READING***	6.2	17.7	13.2	7.8
WRITING***	5.9	16.1	12.8	7.3
COOKING***	5.5	16.2	13.2	7.0
GETTING PLACES***	5.1	15.0	17.3	6.6
DOING LAUNDRY***	5.0	13.8	11.6	6.2
BUSINESS AFFAIRS***	5.3	11.8	4.3	6.1
BATHING/SHAMPOOING***	4.9	11.5	6.0	5.8
BOWEL/BLADDER ACCIDENTS**	5.2	8.7	11.1	5.7
DRESSING/GROOMING***	3.2	8.1	8.2	3.9
TAKING MEDICINE***	2.9	6.6	2.9	3.4
USING THE TELEPHONE***	2.2	5.2	6.8	2.6
USING THE TOILET***	1.9	4.7	8.2	2.4
FEEDING SELF*	.9	1.9	-	1.0
Number	5220	808	59	6087

*Chi square significant at the .05 level.
**Chi square significant at the .01 level.
***Chi square significant at the .0001 level.

TABLE 4-30
PREVALENCE OF DIFFICULTY WITH ACTIVITIES OF DAILY LIVING BY AGE COHORT (ALL ELDERS)

ACTIVITY OF DAILY LIVING	PERCENTAGE OF ELDERS IN AGE COHORT							
	55-59	60-64	65-69	70-74	75-79	80-84	85+	ALL
HEAVY CLEANING/ YARDWORK*	19.8	23.7	26.6	34.8	44.6	52.9	65.5	32.0
LIGHT HSEWORK*	8.7	10.1	12.3	15.1	21.8	29.9	39.6	15.3
WALKING*	6.3	6.9	8.5	11.6	18.9	26.1	46.9	12.6
SHOPPING*	2.9	3.8	5.6	8.2	12.0	23.2	36.4	8.6
READING*	3.9	4.1	4.6	7.7	11.9	16.8	29.8	7.8
WRITING*	3.5	4.1	5.4	7.8	9.7	14.5	26.8	7.3
COOKING*	3.3	3.8	3.7	7.0	10.6	13.8	30.9	7.0
GETTING PLACES*	3.0	3.1	4.3	6.6	9.5	15.6	24.4	6.6
DOING LAUNDRY*	2.5	3.0	3.7	5.4	9.7	13.3	28.2	6.2
BUS. AFFAIRS*	2.2	3.3	4.0	6.3	8.0	14.1	25.4	6.1
BATHE/SHAMPOO*	1.9	3.2	4.3	5.1	7.1	14.0	25.4	5.8
BOWEL/BLADDER ACCIDENTS*	3.5	3.7	3.6	4.9	7.3	12.5	20.2	5.7
DRESS/GROOMING*	2.2	2.2	4.5	3.1	4.6	7.6	20.2	3.9
TAKE MEDICINE*	1.7	2.5	1.6	2.7	4.3	7.8	15.7	3.4
USING TELEPHONE*	0.7	1.4	1.0	2.3	3.0	6.3	17.7	2.6
USING TOILET*	1.2	1.4	1.2	1.3	2.9	6.2	12.7	2.4
FEEDING SELF*	.1	.4	.7	1.0	.7	2.5	7.3	1.0
Number	1115	1432	1016	1030	763	470	266	6093

*Chi square significant at the .0001 level.

TABLE 4-31
PREVALENCE OF DIFFICULTY WITH ACTIVITIES OF DAILY LIVING BY HOUSEHOLD INCOME
(ALL ELDERS)

Activity of Daily Living	Percentage of Elders in Income Group							
	$0-3999	$4000 -6999	$7000 -9999	$10000 -14999	$15000 -19999	$20000 29999	$30000 +	All
HEAVY CLEANING/ YARDWORK**	48.4	54.4	41.2	30.4	21.3	18.0	12.2	34.5
LIGHT HSEWORK**	26.1	30.3	20.9	12.4	7.4	5.0	3.4	16.5
WALKING**	20.5	24.2	15.8	11.7	6.3	5.1	3.0	13.5
SHOPPING**	16.0	20.0	8.7	6.9	3.0	2.6	2.2	9.4
READING**	14.1	17.6	10.9	5.7	2.0	2.1	1.3	8.6
WRITING**	12.8	18.1	8.6	4.8	1.6	3.2	1.2	8.1
COOKING**	11.0	14.1	10.1	5.3	3.2	1.8	2.2	7.6
GET PLACES**	12.9	15.7	8.4	4.3	1.9	1.7	.6	7.2
DOING LAUNDRY**	11.3	12.4	7.9	5.1	2.9	1.4	1.8	6.7
BUS. AFFAIRS**	12.3	12.9	7.5	4.5	2.0	2.4	2.4	6.7
BATHE/SHAMPOO**	8.3	12.4	6.9	4.7	3.1	2.5	1.9	6.3
BOWEL/BLADDER ACCIDENTS**	8.6	10.7	9.3	5.8	2.4	2.3	1.7	6.5
DRESS/GROOMING**	5.2	7.2	5.3	4.1	1.2	2.1	1.8	4.3
TAKE MEDICINE*	2.3	5.7	4.0	4.3	2.0	2.9	2.0	3.7
USING TELEPHONE*	1.6	4.6	3.2	3.1	1.6	1.3	1.0	2.8
USING TOILET**	2.3	4.6	2.4	2.4	1.3	.9	1.0	2.5
FEEDING SELF	.9	1.6	1.3	1.2	.2	.9	1.0	1.1
Number	317	1002	780	844	510	453	530	4436

*Chi square significant at the .001 level.
**Chi square significant at the .0001 level.
***Chi square significant at the .0001 level.

Prevalence of difficulty with activities of daily living differs significantly by sex for all activities except dressing/grooming, taking medicine, using the toilet, and feeding oneself. In each case, female elders report higher levels of difficulty except in use of the telephone. These limitations may reflect the longer life expectancy, and thus higher average age, of females in the sample.

Prevalence of difficulty with activities of daily living differs significantly by race for all activities, with black elders having higher levels of difficulty in all areas than white elders.

Prevalence of difficulty with activities of daily living also differs significantly for all activities by age. In each case there is a strong, direct relationship between age and reported difficulty with ADLs. This findings is consistent with other national studies.

Difficulty with activities of daily living differs signficantly by income for all activities except feeding oneself. The relationship between difficulty and income is inverse with one major exception. The highest levels of difficulty are found, not in the lowest income grouping (household income under $4000), but in the second lowest income grouping (household income between $4000 and $6999).

Summary

The activity of difficulty to the most elders in Arkansas is heavy cleaning and yardwork. Elders in Region III report the greatest level of difficulty with ADLs, and elders in Region VIII report the

lowest level of difficulty. Female elders report significantly more difficulties than male elders, black elders report significantly more difficulties than white elders, older elders report significantly more difficulties than younger elders, and poorer elders report significantly more difficulties than wealthier elders.

4.2.3.2 Sources of Assistance with ADLs

Respondents were also asked who helps the elders who have difficulty with an activity. Sources of assistance included: no help, informal providers (family and friends), formal providers (church groups, government services, volunteer organizations, paid professionals, and paid nonprofessionals), and a combination of formal and informal providers. See Table 4-32 for a breakdown by state and region of sources of assistance for each activity.

TABLE 4-32
SOURCES OF ASSISTANCE FOR ADL DIFFICULTIES BY STATE AND AAA REGION (ALL ELDERS)

DIFFICULTY/ Source of Assistance	Percentage of Elders with Difficulty in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
HEAVY HOUSEWORK									
None	17.6	15.3	20.5	22.2	14.2	19.5	14.2	13.2	17.3
Informal	52.1	44.1	43.5	44.7	41.8	42.9	47.3	49.9	45.4
Formal	29.2	38.7	35.4	32.5	43.2	36.4	37.6	36.4	36.3
Combination	1.2	1.9	.7	.6	.9	1.2	.8	.5	1.0
Number	223	252	303	266	283	214	221	185	1946
LIGHT HOUSEWORK									
None	33.1	29.8	33.3	33.8	32.3	30.5	38.2	31.9	33.1
Informal	46.0	45.5	51.9	48.4	53.9	51.2	35.3	42.4	46.9
Formal	20.1	23.1	14.8	16.1	12.5	17.5	22.8	25.7	18.8
Combination	.7	1.7	-	1.6	1.3	.8	3.7	-	1.3
Number	120	104	128	131	125	106	133	90	937
WALKING									
None	75.4	69.4	77.4	67.6	71.4	65.5	71.8	70.2	71.5
Informal	22.7	24.8	20.6	29.0	22.8	32.2	22.5	25.8	24.7
Formal	-	4.9	-	3.5	5.1	1.1	4.8	4.0	2.8
Combination	1.9	1.0	2.0	-	.8	1.1	.9	-	1.0
Number	89	89	127	107	106	75	95	65	753
SHOPPING									
None	6.6	6.0	9.6	10.0	3.9	10.5	7.7	11.0	8.1
Informal	82.2	80.5	84.4	82.4	87.7	86.5	75.1	71.7	81.4
Formal	9.9	12.1	6.0	6.1	8.4	1.5	15.0	15.7	9.3
Combination	1.3	1.3	-	1.4	-	1.5	2.2	1.6	1.2
Number	65	64	72	74	64	57	74	55	525
READING									
None	51.3	38.0	45.0	31.5	46.4	52.8	38.3	63.2	44.7
Informal	41.9	57.0	52.3	65.0	50.0	47.2	56.9	36.8	51.9
Formal	3.4	5.0	2.7	2.4	3.6	-	3.4	-	2.7
Combination	3.4	-	-	1.2	-	-	1.5	-	.7
Number	50	52	95	66	70	46	55	37	471

TABLE 4-32 (CONT.)
SOURCES OF ASSISTANCE FOR ADL DIFFICULTIES BY STATE AND AAA REGION
(ALL ELDERS)

DIFFICULTY/ Source of Assistance	Percentage of Elders with Difficulty in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
WRITING									
None	52.2	43.5	42.9	23.9	30.9	54.6	28.5	45.6	39.0
Informal	43.5	53.0	54.2	73.6	64.9	41.2	60.7	52.2	56.7
Formal	2.2	3.5	2.8	2.6	4.2	4.1	8.0	2.2	3.7
Combination	2.2	-	-	-	-	-	2.8	-	.6
Number	40	49	91	61	59	42	57	39	438
COOKING*									
None	24.1	15.2	21.8	17.8	17.6	22.0	43.5	14.8	22.4
Informal	62.7	56.6	64.9	67.8	70.3	61.5	34.6	64.8	60.7
Formal	10.8	26.3	13.2	12.8	10.2	14.7	15.4	20.5	14.9
Combination	2.4	2.0	-	1.6	1.9	1.8	6.5	-	2.0
Number	36	43	75	66	65	47	57	38	426
GETTING PLACES									
None	24.5	12.0	24.7	13.1	27.6	16.8	28.7	24.4	21.2
Informal	62.7	61.0	62.9	69.5	67.5	69.6	57.4	61.6	64.4
Formal	7.3	25.0	7.6	17.4	-	13.6	12.0	11.6	11.8
Combination	5.5	2.0	4.7	-	4.9	-	1.9	2.3	2.7
Number	47	43	73	59	42	54	42	37	398
DOING LAUNDRY									
None	2.0	2.2	8.5	4.2	9.8	15.9	11.4	5.1	7.8
Informal	69.3	68.5	74.6	78.0	74.6	62.6	59.9	60.3	69.0
Formal	22.8	29.2	15.5	17.8	15.6	19.6	25.5	34.6	21.6
Combination	5.9	-	1.4	-	-	1.9	3.2	-	1.6
Number	43	38	61	44	57	46	51	34	375
BUSINESS AFFAIRS									
None	8.9	3.3	7.4	9.5	10.5	9.4	9.5	15.9	9.1
Informal	87.1	92.2	79.9	88.6	80.9	82.3	88.3	76.8	84.6
Formal	4.0	4.4	12.8	1.9	8.6	8.3	2.2	7.2	6.4
Number	43	39	64	58	53	41	47	30	374

TABLE 4-32 (CONT.)
SOURCES OF ASSISTANCE FOR ADL DIFFICULTIES BY STATE AND AAA REGION
(ALL ELDERS)

DIFFICULTY/ Source of Assistance	Percentage of Elders with Difficulty in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
BATHING									
None	9.6	12.5	25.8	16.7	12.0	25.3	27.5	17.2	19.1
Informal	66.0	54.2	51.5	60.6	65.0	56.6	45.9	39.1	55.3
Formal	20.2	30.6	21.2	21.3	23.0	18.2	26.6	43.8	24.4
Combination	4.3	2.8	1.5	1.4	-	-	-	-	1.2
Number	40	31	57	56	45	43	54	28	353
BOWEL/BLADDER ACCIDENTS									
None	69.8	67.0	62.9	57.7	61.0	69.0	56.4	55.2	62.5
Informal	26.4	28.6	28.4	35.9	30.5	24.1	32.0	34.3	30.1
Formal	1.9	4.4	3.4	4.3	8.5	2.3	9.6	10.4	5.3
Combination	1.9	-	5.2	2.2	-	4.6	2.0	-	2.1
Number	46	39	50	54	44	37	40	29	339
DRESSING*									
None	-	-	21.3	14.1	11.0	37.5	15.8	14.3	15.5
Informal	92.0	69.2	61.2	69.8	72.4	36.1	71.3	47.6	65.0
Formal	4.0	26.9	17.5	14.1	13.8	23.6	12.9	38.1	17.7
Combination	4.0	3.8	-	2.0	2.8	2.8	-	-	1.8
Number	21	22	34	39	30	31	40	18	236
TAKING MEDICINE									
None	28.6	16.1	15.0	11.8	12.9	30.0	24.7	12.1	18.5
Informal	69.0	64.5	75.0	75.1	74.2	63.3	64.1	66.7	70.1
Formal	2.4	19.4	10.0	13.1	12.9	6.7	11.2	21.2	11.5
Number	36	27	34	36	26	13	24	14	210
USE OF TELEPHONE									
None	32.6	35.2	17.5	17.6	5.1	40.0	24.2	16.1	23.5
Informal	67.4	64.8	68.4	79.6	84.6	54.3	67.6	71.0	70.1
Formal	-	-	7.0	2.9	10.3	5.7	4.1	12.9	4.8
Combination	-	-	7.0	-	-	-	4.1	-	1.6
Number	18	23	25	27	16	15	20	13	157

TABLE 4-32 (CONT.)
SOURCES OF ASSISTANCE FOR ADL DIFFICULTIES
BY STATE AND AAA REGION
(ALL ELDERS)

DIFFICULTY/ Source of Assistance	Percentage of Elders with Difficulty in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
TOILETING									
None	37.0	21.2	34.1	20.9	37.1	44.4	39.8	19.4	32.4
Informal	40.7	66.7	61.0	66.9	50.0	44.4	39.0	58.1	53.0
Formal	14.8	12.1	-	12.3	12.9	5.6	18.0	22.6	12.3
Combination	7.4	-	4.9	-	-	5.6	3.2	-	2.3
Number	12	14	18	21	26	15	25	13	144
FEEDING**									
None	-	16.7	20.0	-	15.0	71.4	-	12.5	14.5
Informal	100.0	50.0	70.0	87.9	55.0	28.6	83.7	31.3	66.0
Formal	-	33.3	10.0	12.1	30.0	-	16.3	56.3	19.5
Number	4	5	9	13	8	6	10	7	62

*Chi square significant at the .05 level.
**Chi square significant at the .01 level.

For the most part, elders who have difficulty with activities of daily living rely on family and friends for informal assistance. In only two areas, walking and bowel/bladder accidents, are they more likely to have no help than informal help. In no instance are they more likely to have formal help than informal or no help. The activity with which elders are most likely to receive informal help is business affairs, and the activity with which they are least likely to receive informal help is doing laundry. The activity with which elders are most likely to receive formal assistance is heavy housework/yardwork, and the activity with which they are least likely to receive formal assistance is reading.

In only three cases does the source of assistance differ significantly by region: cooking, feeding self, and dressing/grooming.

Region I reports the highest level of reliance on informal help for feeding and dressing/grooming, and Region VIII has the highest level of reliance on formal assistance with feeding and dressing/-grooming. Region II has the highest level of reliance on formal assistance with cooking, and Region V reports the highest level of reliance on informal help with cooking. Region VI has the highest prevalence of no assistance for elders having difficulty with feeding and dressing/grooming, and Region VII has the highest prevalence of no assistance for elders having difficulty with cooking.

Summary

For the most part, elders who have difficulty with ADLs, rely on family and friends for informal help. In only two instances are they likely to have no help: walking and bowel/bladder accidents. The activity with which elders are most likely to receive formal assistance is heavy housework or yardwork.

4.2.3.3 Frequency of Assistance Received

Respondents were further asked how often assistance is received by the elders who indicate that someone helps them with an activity of daily living. See Table 4-33 for a breakdown by state and region of frequency of assistance with an ADL.

TABLE 4-33
FREQUENCY OF ASSISTANCE RECEIVED FOR ADL DIFFICULTIES BY STATE AND AAA REGION
(ALL ELDERS)

DIFFICULTY/ Frequency of Assistance	Percentage of Elders Receiving Help in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
HEAVY CLEANING/ YARDWORK									
>Daily	.5	1.2	1.4	1.9	1.0	1.8	.4	.8	1.1
Daily	4.8	3.7	7.0	8.5	6.4	6.4	3.5	5.2	5.7
>Weekly	4.8	2.3	6.1	5.6	6.3	5.9	5.3	2.4	4.9
Weekly	38.2	43.8	41.3	30.6	34.8	35.9	33.1	43.2	37.6
>Monthly	34.6	35.4	32.5	38.1	36.3	37.4	39.0	42.1	36.7
Monthly or <Monthly	17.2	13.6	11.8	15.4	15.1	12.7	18.7	6.3	14.0
Number	180	209	241	204	243	169	188	158	1591
LIGHT HOUSEWK**									
>Daily	4.4	4.1	12.1	14.6	13.4	7.3	6.3	12.8	9.5
Daily	32.0	28.8	47.5	49.5	33.1	49.7	30.6	37.6	38.7
>Weekly	30.4	18.2	14.1	17.7	26.8	17.0	33.1	23.4	22.6
Weekly	25.4	35.3	15.7	12.9	14.1	16.4	17.8	18.4	19.2
>Monthly	5.5	9.4	2.0	3.4	5.8	7.3	5.8	4.3	5.4
Monthly or <Monthly	2.2	4.1	8.6	1.8	6.8	2.4	6.5	3.5	4.6
Number	78	73	85	85	85	71	81	61	619
SHOPPING***									
>Daily	-	-	1.3	1.8	5.7	-	-	8.8	2.1
Daily	-	5.7	9.9	11.1	9.8	3.5	10.0	18.6	8.5
>Weekly	13.6	10.7	14.6	8.2	11.5	16.5	14.8	7.1	12.2
Weekly	75.7	67.1	51.7	50.8	58.1	63.5	43.2	53.1	57.5
>Monthly	8.6	3.6	8.6	13.6	8.1	7.8	22.8	8.8	10.6
Monthly or <Monthly	2.1	12.9	13.9	14.5	6.8	8.7	9.2	3.5	9.2
Number	60	60	65	64	61	49	69	49	477
DOING LAUNDRY									
>Daily	-	2.3	1.5	3.8	1.6	-	-	4.1	1.6
Daily	8.2	6.9	14.6	22.7	29.8	12.8	12.5	9.5	15.3
>Weekly	24.7	33.3	22.3	27.6	9.0	11.6	22.2	25.7	21.6
Weekly	57.7	52.9	46.2	32.6	53.9	64.0	50.2	50.0	50.6
>Monthly	6.2	4.6	9.2	8.2	5.7	11.6	12.8	10.8	8.6
Monthly or <Monthly	3.1	-	6.2	5.1	-	-	2.3	-	2.3
Number	42	37	56	42	51	37	45	32	341

TABLE 4-33 (CONT.)
FREQUENCY OF ASSISTANCE RECEIVED FOR ADL DIFFICULTIES BY STATE AND AAA REGION
(ALL ELDERS)

DIFFICULTY/ Frequency of Assistance	Percentage of Elders Receiving Help in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
BUSINESS AFFAIRS									
>Daily	3.5	-	1.4	2.3	-	-	2.9	8.6	2.0
Daily	9.3	6.9	14.5	17.1	10.9	4.8	15.8	15.5	12.2
>Weekly	4.7	11.5	4.3	6.8	6.1	7.2	4.4	3.4	6.0
Weekly	25.6	47.1	30.4	24.6	27.1	30.1	19.9	24.1	28.6
>Monthly	16.3	2.3	11.6	16.6	21.8	16.9	21.8	13.8	15.3
Monthly or <Monthly	40.7	32.2	37.7	32.6	34.1	41.0	35.2	34.5	35.9
Number	37	37	59	50	47	36	43	25	334
COOKING*									
>Daily	38.1	36.9	37.6	38.4	28.3	34.9	34.5	26.4	34.5
Daily	38.1	38.1	51.1	43.1	36.8	37.3	42.4	62.5	43.7
>Weekly	9.5	17.9	8.3	13.5	28.7	8.4	20.4	6.9	14.7
Weekly	9.5	4.8	1.5	5.0	6.2	12.0	2.6	4.2	5.4
>Monthly	4.8	2.4	1.5	-	-	-	-	-	.9
Monthly or <Monthly	-	-	-	-	-	7.2	-	-	.8
Number	27	36	57	53	53	36	31	31	324
GETTING PLACES**									
>Daily	2.5	4.5	6.5	2.3	8.5	7.9	2.8	23.8	6.7
Daily	16.5	9.1	7.3	14.3	23.4	15.8	28.6	14.3	15.1
>Weekly	7.6	11.4	12.1	7.7	11.3	21.8	5.6	15.9	11.8
Weekly	15.2	44.3	22.6	24.1	29.8	34.7	23.8	22.2	27.2
>Monthly	16.5	9.1	25.8	22.2	15.6	4.0	21.9	6.3	15.9
Monthly or <Monthly	41.8	21.6	25.8	29.4	11.3	15.8	17.4	17.5	23.3
Number	34	38	53	52	29	43	29	27	305
BATHING/ SHAMPOOING									
>Daily	2.5	6.3	4.1	14.1	4.2	-	11.0	17.0	7.3
Daily	35.4	44.4	48.0	46.8	51.3	44.4	36.3	49.1	44.5
>Weekly	39.2	23.8	24.5	23.6	22.5	19.4	38.0	28.3	27.4
Weekly	17.7	22.2	14.3	10.2	16.8	30.6	12.7	5.7	16.0
>Monthly	2.5	3.2	9.2	5.3	5.2	2.8	-	-	3.9
Monthly or <Monthly	2.5	-	-	-	-	2.8	2.1	-	.9
Number	34	27	42	45	39	31	39	23	280

TABLE 4-33 (CONT.)
FREQUENCY OF ASSISTANCE RECEIVED FOR ADL DIFFICULTIES
BY STATE AND AAA REGION
(ALL ELDERS)

DIFFICULTY/ Frequency of Assistance	Percentage of Elders Receiving Help in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
WRITING									
>Daily	-	7.7	-	-	5.3	-	6.0	10.2	3.3
Daily	18.2	20.0	24.8	13.6	35.4	13.6	17.5	16.3	20.8
>Weekly	4.5	13.8	9.9	14.2	-	22.7	6.0	16.3	10.1
Weekly	11.4	21.5	16.5	14.8	26.5	22.7	19.0	12.2	18.3
>Monthly	22.7	15.4	10.7	21.0	6.3	13.6	31.6	8.2	16.4
Monthly or <Monthly	43.2	21.5	38.0	36.3	26.5	27.3	19.9	36.7	31.0
Number	19	28	52	46	39	19	41	21	265
READING									
>Daily	-	2.7	-	-	5.8	-	3.6	-	1.6
Daily	54.4	28.8	30.5	45.3	43.9	36.0	20.9	31.2	36.2
>Weekly	10.5	20.5	27.1	16.4	10.5	12.0	23.4	25.0	18.7
Weekly	19.3	27.4	14.4	13.6	14.0	22.0	24.0	37.5	19.4
>Monthly	12.3	-	5.1	15.9	4.7	12.0	12.1	6.2	8.6
Monthly or <Monthly	3.5	20.5	22.9	8.8	21.1	18.0	15.9	-	15.5
Number	25	31	51	45	35	22	34	14	256
WALKING									
>Daily	20.4	28.6	41.8	18.2	45.4	30.0	32.1	33.3	31.3
Daily	55.1	34.9	38.8	36.4	41.8	46.7	44.9	53.3	43.0
>Weekly	8.2	7.9	7.5	17.2	9.9	-	6.1	-	7.7
Weekly	8.2	17.5	3.0	16.4	-	11.7	6.1	6.7	8.9
>Monthly	-	6.3	-	8.6	-	5.0	10.9	-	4.2
Monthly or <Monthly	8.2	4.8	9.0	3.1	2.8	6.7	-	6.7	5.0
Number	21	27	29	34	29	26	27	19	212
DRESSING/ GROOMING									
>Daily	20.0	23.1	19.0	28.5	27.1	17.8	27.2	38.9	25.0
Daily	52.0	53.8	65.1	53.5	57.4	68.9	43.5	61.1	55.9
>Weekly	12.0	11.5	11.1	9.7	3.1	-	22.1	-	9.8
Weekly	4.0	7.7	-	5.9	13.3	13.3	3.6	-	5.9
>Monthly	12.0	-	4.8	-	-	-	3.6	-	2.6
Monthly or <Monthly	-	3.8	-	2.4	-	-	-	-	.8
Number	22	22	27	33	27	19	33	15	199

TABLE 4-33 (CONT.)
FREQUENCY OF ASSISTANCE RECEIVED FOR ADL DIFFICULTIES BY STATE AND AAA REGION
(ALL ELDERS)

DIFFICULTY/ Frequency of Assistance	Percentage of Elders Receiving Help in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
TAKING MEDICINE									
>Daily	43.3	26.0	32.4	26.6	48.1	42.1	47.7	41.4	37.0
Daily	50.0	60.0	48.5	59.3	42.3	42.1	30.6	51.7	49.4
>Weekly	-	4.0	10.3	10.6	3.8	-	14.9	-	6.3
Weekly	-	4.0	-	3.5	-	15.8	6.8	6.9	3.2
>Monthly	-	6.0	4.4	-	5.8	-	-	-	2.3
Monthly or <Monthly	6.7	-	4.4	-	-	-	-	-	1.8
Number	26	21	29	30	21	8	18	12	167
BOWEL/BLADDER ACCIDENTS									
>Daily	46.7	23.3	14.0	20.1	34.9	24.0	42.1	46.4	30.3
Daily	40.0	50.0	37.2	48.4	31.3	32.0	29.4	25.0	37.4
>Weekly	-	-	20.9	-	12.0	20.0	16.2	-	8.7
Weekly	6.7	13.3	4.7	17.2	21.7	8.0	-	7.1	10.3
>Monthly	6.7	6.7	18.6	10.7	-	8.0	12.3	7.1	9.2
Monthly or <Monthly	-	6.7	4.7	3.5	-	8.0	-	14.3	4.1
Number	13	13	18	22	17	11	16	12	123
USE OF TELEPHONE									
>Daily	13.8	31.4	8.9	12.2	12.1	-	13.6	30.8	15.4
Daily	20.7	25.7	31.1	59.1	33.3	52.6	26.8	38.5	36.6
>Weekly	13.8	17.1	22.2	4.8	18.2	10.5	45.5	-	16.9
Weekly	6.9	20.0	13.3	-	18.2	26.3	7.0	23.1	12.6
>Monthly	37.9	-	4.4	14.3	12.1	-	-	7.7	9.6
Monthly or <Monthly	6.9	5.7	20.0	9.5	6.1	10.5	7.0	-	8.9
Number	12	15	19	22	14	8	15	11	117
TOILETING									
>Daily	66.7	69.2	29.6	44.1	48.7	25.0	54.0	59.1	49.4
Daily	20.0	7.7	63.0	37.9	51.3	75.0	21.4	31.8	37.9
>Weekly	13.3	15.4	7.4	13.2	-	-	24.6	-	10.0
>Monthly	-	-	-	-	-	-	-	9.1	.9
Monthly or <Monthly	-	7.7	-	4.8	-	-	-	-	1.8
Number	6	11	12	16	16	7	15	9	93

TABLE 4-33 (CONT.)
FREQUENCY OF ASSISTANCE RECEIVED FOR ADL DIFFICULTIES
BY STATE AND AAA REGION
(ALL ELDERS)

DIFFICULTY/ Frequency of Assistance	Percentage of Elders Receiving Help in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
FEEDING SELF									
>Daily	80.0	60.0	37.5	43.9	76.5	50.0	59.3	50.0	55.8
Daily	-	-	62.5	46.5	11.8	50.0	32.5	50.0	33.9
>Weekly	20.0	20.0	-	-	-	-	8.1	-	4.9
Weekly	-	-	-	-	11.8	-	-	-	1.6
>Monthly	-	20.0	-	9.6	-	-	-	-	3.8
Number	4	4	7	11	7	2	10	6	51

*Chi square significant at the .05 level.
**Chi square significant at the .01 level.
***Chi square significant at the .001 level.

The two activities for which the most common frequency of assistance received is more than once a day are feeding self and toileting. Activities for which daily assistance is most common include light housework, cooking, dressing/grooming, bathing/-shampooing, taking medications, help with bowel/bladder accidents, use of telephone, walking, and reading. Weekly help is the most common frequency of assistance for heavy house/yard work, shopping, laundry, and getting places outside walking distance. Monthly or less frequent help is the most common frequency of assistance with business affairs and writing.

Only four activities differ significantly by region in the frequency of assistance received by elders: light housework, cooking, shopping, and getting places outside walking distance. Region VIII elders receive the most frequent assistance with shopping and getting places. Region IV elders receive the most frequent assistance with light housework, and Region III elders receive the most frequent assistance with cooking. Region II elders receive the least frequent assistance with light housework, cooking, and shopping, and Region I elders receive the least frequent assistance with getting places.

Summary

There are only two activities, feeding and toileting, for which the most common frequency of assistance received is more than once a day. Daily assistance is most common for light housework, cooking, dressing/-grooming, bathing/shampooing, taking medications, bowel/bladder accidents, use of the telephone, walking, and reading. Weekly help is most common for all other activities except business affairs and writing, for which monthly or less frequent help is most common.

4.2.4 Health

Earlier studies have documented that perceptions of health status and awareness of problems are strongly related to utilization of services. While a majority of elders consistently describe their health as good or excellent, they also often report more health problems than would be estimated simply by examining existing medical records. Validation studies that have followed up self-reports with physical examinations confirm the accuracy of the self-reports (McKinlay, 1985; Maddox and Douglass, 1973).

4.2.4.1 Health Status and Health Risks

Respondents in the Arkansas study were asked the overall health status of elders in their household and whether the elders use tobacco products or consume more than two alcoholic beverages a day. See Table 4-34 for a breakdown of health status and health risks by state and region.

TABLE 4-34
HEALTH STATUS AND HEALTH RISKS BY STATE AND AAA REGION
(ALL ELDERS)

Health Measure	Percentage of Elders in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
Overall Health Status*									
Excellent	22.0	17.2	16.2	14.1	21.5	23.0	15.7	20.5	18.7
Good	44.3	40.6	42.0	40.1	42.2	36.9	42.7	44.5	41.7
Average	15.1	18.9	18.8	21.5	13.0	16.3	18.5	18.9	17.7
Fair	11.5	13.7	13.0	15.2	16.5	15.8	14.2	9.3	13.7
Poor	7.0	9.5	10.1	9.0	6.9	7.9	8.9	6.8	8.3
Health Risk									
Smoking or other use of tobacco	23.7	25.3	26.8	28.1	24.9	21.5	25.0	23.4	24.9
Having >2 alcoholic drinks/day	2.9	3.1	1.9	1.4	3.0	1.8	2.3	2.6	2.4
Number	763	762	780	796	783	668	731	726	6009

*Chi square significant at the .0001 level.

The most frequently reported health status for elders is "good," but almost a fourth report only "fair" or "poor" health. Almost a fourth indicate that they smoke or use other tobacco products, but only 2.4% indicate that they consume more than two alcoholic drinks a day. Overall health status differs significantly by region, but smoking and drinking behavior do not. Compared to other regions, elders in Region VI are most likely to report excellent health, and Region II elders are most likely to report poor health.

Tables 4-35 to 4-38 provide breakdowns of health status and health risks by sex, race, age, and income, respectively.

TABLE 4-35
HEALTH STATUS AND HEALTH RISKS BY SEX
(ALL ELDERS)

HEALTH MEASURE	% OF ELDERS IN SEX TYPE MALE	FEMALE	ALL
Overall Health Status			
Excellent	18.8	18.6	18.7
Good	42.2	41.4	41.7
Average	16.9	18.2	17.7
Fair	13.5	13.7	13.6
Poor	8.6	8.0	8.3
Health Risk			
Smoking or other use of tobacco*	34.0	18.8	24.9
Having >2 alcoholic drinks/day*	4.5	1.0	2.4
Number	2415	3618	6034

*Chi square significant at the .0001 level.

TABLE 4-36
HEALTH STATUS AND HEALTH RISKS BY RACIAL/ETHNIC GROUP
(ALL ELDERS)

Health Measure	% of Elders in Racial/Ethnic Group White	Black	Other	All
Overall Health Status*				
Excellent	20.2	9.0	17.2	18.7
Good	42.9	34.7	29.2	41.7
Average	17.1	21.8	12.4	17.7
Fair	12.4	21.7	15.9	13.7
Poor	7.4	12.9	25.3	8.3
Health Risk				
Smoking or other use of tobacco*	23.6	32.4	39.0	24.9
Having >2 alcoholic drinks/day	2.5	2.0	-	2.4
Number	5175	796	57	6028

*Chi square significant at the .0001 level.

TABLE 4-37
HEALTH STATUS AND HEALTH RISKS BY AGE COHORT (ALL ELDERS)

HEALTH MEASURE	PERCENTAGE OF ELDERS IN AGE COHORT 55-59	60-64	65-69	70-74	75-79	80-84	85+	ALL
Overall Health Status**								
Excellent	20.3	18.3	16.9	16.7	15.0	14.5	12.9	17.2
Good	44.7	42.5	36.7	39.6	38.4	40.3	35.7	40.5
Average	13.7	16.2	17.8	19.5	18.4	19.8	19.9	17.3
Fair	11.2	14.6	18.9	16.7	17.6	14.1	15.1	15.4
Poor	10.2	8.5	9.6	7.5	10.5	11.3	16.5	9.6
Health Risk								
Smoking or other use of tobacco**	31.7	30.6	23.9	20.7	19.0	17.0	17.0	24.9
Having >2 alcoholic drinks/day*	2.8	3.4	2.4	2.0	1.7	.7	1.0	2.4
Number	1105	1415	1002	1024	756	462	259	6023

*Chi square significant at the .01 level.
**Chi square significant at the .0001 level.

TABLE 4-38
HEALTH STATUS AND HEALTH RISKS BY HOUSEHOLD INCOME
(ALL ELDERS)

Health Measure	$0-3999	$4000-6999	$7000-9999	$10000-14999	$15000-19999	$20000 29999	$30000 +	All
	Percentage of Elders in Income Group							
Overall Health Status*								
Excellent	8.4	9.9	9.3	14.0	21.2	23.9	37.1	16.4
Good	29.8	28.2	37.2	41.6	50.3	51.0	43.9	39.2
Average	26.7	21.7	21.0	17.5	13.2	10.2	10.0	17.6
Fair	17.3	23.1	16.7	17.9	11.7	10.6	6.6	16.0
Poor	17.8	17.1	15.7	9.0	3.5	4.3	2.4	10.8
Health Risk								
Smoking or other use of tobacco	26.2	27.0	28.2	24.7	27.9	26.1	23.4	26.3
Having >2 alcoholic drinks/day*	.3	1.0	1.5	3.1	3.3	2.8	6.6	2.6
Number	313	996	772	835	503	448	523	4390

*Chi square significant at the .0001 level.

Overall health status differs significantly by race, age, and income. Smoking behavior differs significantly by sex, race, and age, while drinking behavior differs by sex, age, and income. Although overall health status does not differ significantly by sex, more older men smoke and consume alcoholic beverages than do older women. White elders report better overall health status than black elders and are less likely to smoke. Younger elders are more likely to report excellent health status than older elders, while elders age 85 or older are most likely to report poor health status. The younger the elder, the more likely the elder to smoke and consume alcoholic beverages. The higher the income, the better the health status of elders and the more likely the elder to consume more than two alcoholic beverages a day.

Summary

Most elders report good to excellent overall health status, but almost a fourth report only fair or poor health. Compared to other regions, elders in Region VI are most likely to report excellent health, and elders in Region II are most likely to report poor health. More older men smoke and drink than do older women. White elders report better health status and lower smoking rates than do black elders. Older elders report poorer health and less smoking and alcoholic consumption than younger elders. Higher income elders report better health and more consumption of alcoholic beverages than lower income elders.

4.2.4.2 Chronic Health Problems

Respondents were also asked whether any elders in their household currently had any of twenty chronic health problems. See Table 4-39 for prevalence levels of chronic health problems by state and region.

TABLE 4-39
PREVALENCE OF CHRONIC HEALTH PROBLEMS BY STATE AND AAA REGION (ALL ELDERS)

HEALTH PROBLEM	Percentage of Elders in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
ARTHRITIS**	47.4	49.0	48.9	47.9	44.7	43.2	46.8	40.4	46.1
HIGH BLOOD PRESSURE****	30.2	34.7	37.6	43.7	34.3	33.0	38.5	33.2	35.8
DIFFICULTY HEARING	23.0	25.6	24.8	23.2	20.9	23.8	21.1	20.1	22.8
HEART CONDITION*	22.0	21.4	19.5	18.8	24.6	23.5	23.9	18.7	21.5
EYE DISEASES*	16.4	18.0	20.1	16.8	20.7	16.3	17.4	14.2	17.5
DIFFICULTY BREATHING*	13.5	17.6	17.3	13.3	14.0	17.4	13.9	15.4	15.3
PROBLEMS WITH TEETH/GUMS/ DENTURES**	12.5	13.2	18.0	16.0	14.6	13.5	15.6	10.7	14.3
DIFFICULTY REMEMBERING EVENTS****	11.5	14.6	18.3	14.7	12.8	15.1	14.9	8.5	13.8
FREQUENT DEPRESSION/ STRESS/ANXIETY	12.6	14.8	15.8	12.4	12.6	12.9	14.0	10.9	13.3
DIABETES	9.8	9.6	10.4	10.0	7.5	7.5	9.0	8.6	9.1
FALLS/ ACCIDENTS	9.5	10.2	9.7	8.3	8.5	9.3	8.8	8.1	9.1
KIDNEY PROBLEMS	7.8	9.2	8.6	10.7	8.5	7.8	8.0	7.5	8.5
HARDENING OF THE ARTERIES	9.1	9.8	8.4	8.6	8.7	8.5	8.2	6.3	8.4
CANCER	5.0	5.8	5.3	3.3	6.1	5.9	5.7	5.9	5.6
DIFFICULTY UNDERSTANDING INSTRUCTIONS***	4.4	5.4	7.6	5.4	3.2	4.3	5.5	2.8	4.9

TABLE 4-39 (CONT.)
PREVALENCE OF CHRONIC HEALTH PROBLEMS BY STATE AND AAA REGION (ALL ELDERS)

HEALTH PROBLEM	Percentage of Elders in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
STROKE	5.4	5.4	3.4	3.3	5.9	3.9	4.0	4.5	4.5
DIFFICULTY TALKING	1.6	2.1	1.0	1.9	.9	1.3	1.7	.8	1.4
OTHER EMOTIONAL PROBLEMS	1.1	1.7	1.6	1.2	1.1	.6	.6	.9	1.1
PARKINSON'S DISEASE	.6	.1	1.1	1.3	.4	1.1	1.1	.5	.8
ALZHEIMER'S DISEASE	.7	.8	.8	.6	.1	.3	.5	.2	.5
Number	769	774	792	811	786	674	734	728	6068

*Chi square significant at the .05 level.
**Chi square significant at the .01 level.
***Chi square significant at the .001 level.
****Chi square significant at the .0001 level.

The most common health problem cited is arthritis (46.1%), followed by high blood pressure (35.8%). These rankings are consistent with findings from national samples. Eight health problems vary significantly by region: difficulty with breathing, difficulty with remembering events, difficulty with understanding instructions, eye diseases, heart condition, high blood pressure, arthritis, and teeth/gum/denture problems. The remaining twelve health problems do not differ significantly by region.

Region II reports the highest prevalence of arthritis and difficulty breathing. Region III ranks first in difficulty remembering events, difficulty understanding instructions, and problems with teeth, dentures, or gums. Compared to other regions, Region III elders have the lowest income, a correlate of poor health. Region IV records the highest prevalence of high blood pressure, and Region V the highest levels of heart condition and eye disease. Region IV has the highest proportion of black elders, and high blood pressure is more common among black Americans than among white Americans. Region V elders are the oldest group in the study.

Region VIII again records the fewest problems, ranking last in difficulty remembering events, difficulty understanding instructions, eye diseases, arthritis, heart condition, and problems with teeth, dentures, or gums. Compared to other regions, Region VIII elders are younger and richer, and age and income are correlates of good health. Region I has the lowest prevalence of high blood pressure, and Region IV has the lowest prevalence of difficulty breathing. Region I has the largest proportion of white elders, a profile consistent with lower prevalence rates of hypertension.

Respondents who indicated that an elder currently suffers from falls or accidents were asked whether the falls or accidents had ever resulted in broken bones. In only 1.3% of the cases did broken bones result.

Tables 4-40 to 4-43 provide breakdowns of chronic health problems by sex, race, age, and income, respectively.

TABLE 4-40
PREVALENCE OF CHRONIC HEALTH PROBLEMS BY SEX
(ALL ELDERS)

HEALTH PROBLEM	% OF ELDERS IN SEX TYPE MALE	FEMALE	ALL
ARTHRITIS***	37.6	51.9	46.2
HIGH BLOOD PRESSURE***	30.4	39.3	35.8
DIFFICULTY HEARING***	29.2	18.6	22.8
HEART CONDITION**	23.3	20.3	21.5
EYE DISEASES***	14.0	19.9	17.5
DIFFICULTY BREATHING	15.7	15.0	15.3
PROBLEMS WITH TEETH/GUMS/DENTURES***	12.1	15.8	14.4
DIFFICULTY REMEMBERING EVENTS***	11.6	15.4	13.9
FREQUENT DEPRESSION/STRESS/ANXIETY***	9.4	15.8	13.2
DIABETES	8.3	9.6	9.1
FALLS/ACCIDENTS***	4.7	12.0	9.1
KIDNEY PROBLEMS**	6.9	9.7	8.6
HARDENING OF THE ARTERIES	8.9	8.2	8.4
CANCER	5.7	5.6	5.6
DIFFICULTY UNDERSTANDING INSTRUCTIONS**	3.6	5.7	4.9
STROKE	5.1	4.1	4.5
DIFFICULTY TALKING	1.6	1.3	1.4
OTHER EMOTIONAL PROBLEMS	1.0	1.2	1.1
PARKINSON'S DISEASE	.9	.7	.8
ALZHEIMER'S DISEASE	.3	.6	.5
Number	2434	3658	6093

*Chi square significant at the .01 level.
**Chi square significant at the .001 level.
***Chi square significant at the .0001 level.

TABLE 4-41
PREVALENCE OF CHRONIC HEALTH PROBLEMS BY RACIAL/ETHNIC GROUP (ALL ELDERS)

	% of Elders in Racial/Ethnic Group			
Health Problem	White	Black	Other	All
ARTHRITIS****	44.8	54.8	52.2	46.2
HIGH BLOOD PRESSURE****	33.2	52.5	37.4	35.8
DIFFICULTY HEARING*	23.0	21.0	35.0	22.8
HEART CONDITION	21.3	22.8	20.0	21.5
EYE DISEASES****	16.5	23.5	23.6	17.5
DIFFICULTY BREATHING***	14.7	18.0	29.4	15.3
DENTAL PROBLEMS****	12.6	25.3	23.4	14.4
DIFFICULTY REMEMBERING****	13.0	19.1	22.7	13.9
DEPRESSION/STRESS/ANXIETY**	12.7	16.8	17.3	13.3
DIABETES****	8.3	13.7	12.9	9.1
FALLS/ACCIDENTS	8.8	10.4	12.9	9.1
KIDNEY PROBLEMS**	8.1	11.6	11.1	8.6
HARDENING OF THE ARTERIES*	8.8	6.5	4.6	8.5
CANCER****	6.0	2.6	11.8	5.6
DIFFICULTY UNDERSTANDING****	4.0	10.4	7.0	4.9
STROKE	4.4	5.1	2.2	4.5
DIFFICULTY TALKING	1.3	2.0	1.8	1.4
OTHER EMOTIONAL PROBLEMS	1.0	1.9	2.2	1.1
PARKINSON'S DISEASE	.8	.9	-	.8
ALZHEIMER'S DISEASE	.5	.8	-	.5
Number	5520	808	59	6087

*Chi square significant at the .05 level.
**Chi square significant at the .01 level.
***Chi square significant at the .001 level.
****Chi square significant at the .0001 level.

TABLE 4-42
PREVALENCE OF CHRONIC HEALTH PROBLEMS BY AGE COHORT
(ALL ELDERS)

HEALTH PROBLEM	PERCENTAGE OF ELDERS IN AGE COHORT							
	55-59	60-64	65-69	70-74	75-79	80-84	85+	ALL
ARTHRITIS****	35.9	41.9	46.2	47.4	56.5	56.0	60.6	46.2
HIGH BLOOD PRESSURE****	29.3	34.0	36.0	37.6	41.0	40.3	41.2	35.8
DIFFICULTY HEARING****	13.8	15.3	20.3	24.5	33.6	39.6	43.8	22.8
HEART CONDITION****	12.7	18.1	21.0	23.6	29.2	29.4	34.8	21.5
EYE DISEASES****	8.0	9.2	14.5	20.2	30.1	34.7	37.3	17.5
DIFFICULTY BREATHING***	13.7	14.9	12.1	15.[illegible]	18.6	18.3	19.3	15.3
PROBLEMS WITH TEETH/GUMS/ DENTURES**	11.7	14.3	13.5	14.9	15.6	16.3	20.2	14.4
DIFFICULTY REMEMBERING EVENTS****	10.7	8.7	11.5	13.7	19.8	23.3	30.6	13.9
FREQUENT DEPRESSION/ STRESS/ANXIETY	13.2	13.8	10.7	13.1	14.3	15.6	13.5	13.2
DIABETES*	6.7	8.7	9.2	9.6	11.4	11.3	7.9	9.1
FALLS/ ACCIDENTS****	5.1	6.1	6.2	8.2	14.6	20.8	19.5	9.1
KIDNEY PROBLEMS****	5.6	6.3	7.0	8.9	11.5	15.9	16.6	8.6
HARDENING OF THE ARTERIES****	4.8	5.6	7.3	8.4	13.1	14.9	18.5	8.4
CANCER	4.3	5.2	6.0	6.0	6.4	6.3	7.2	5.6
DIFFICULTY UNDERSTANDING INSTRUCTIONS****	1.5	3.6	3.4	5.5	7.0	9.3	15.2	4.9

TABLE 4-42 CONTINUED
PREVALENCE OF CHRONIC HEALTH PROBLEMS BY AGE COHORT
(ALL ELDERS)

HEALTH PROBLEM	PERCENTAGE OF ELDERS IN AGE COHORT							
	55-59	60-64	65-69	70-74	75-79	80-84	85+	ALL
STROKE****	2.3	3.6	4.6	4.9	5.9	7.1	8.3	4.5
DIFFICULTY TALKING****	1.0	.5	1.4	1.3	1.9	2.9	5.0	1.4
OTHER EMOTIONAL PROBLEMS**	1.7	.9	1.1	.8	.6	1.2	3.4	1.1
PARKINSON'S DISEASE***	.3	.3	.3	1.2	1.3	1.8	1.7	.8
ALZHEIMER'S DISEASE****	.1	.2	.4	.4	.7	1.1	3.3	.5
Number	1115	1432	1016	1030	763	470	266	6093

*Chi square significant at the .05 level.
**Chi square significant at the .01 level.
***Chi square significant at the .001 level.
****Chi square significant at the .0001 level.

TABLE 4-43
PREVALENCE OF CHRONIC HEALTH PROBLEMS BY HOUSEHOLD INCOME (ALL ELDERS)

	Percentage of Elders in Income Group							
Health Problem	$0-3999	$4000-6999	$7000-9999	$10000-14999	$15000-19999	$20000 29999	$30000 +	All
ARTHRITIS*	61.1	62.4	51.6	48.7	40.2	36.2	26.3	48.3
HIGH BLOOD PRESSURE*	46.4	44.8	40.0	34.1	29.1	30.0	26.5	36.5
DIFFICULTY HEARING*	32.0	31.5	27.3	24.1	17.9	18.2	13.4	24.3
HEART CONDITION*	27.3	29.8	28.7	20.8	14.2	16.3	13.6	22.6
EYE DISEASES*	23.8	28.8	19.1	20.1	10.4	10.6	7.9	18.6
DIFFICULTY BREATHING*	21.4	24.9	22.8	13.4	12.9	9.1	7.0	17.0
PROBLEMS WITH TEETH/GUMS/ DENTURES*	26.5	23.7	19.5	11.7	7.0	6.0	6.4	15.1
DIFFICULTY REMEMBERING EVENTS*	26.1	24.5	17.8	12.1	7.5	10.4	6.7	15.6
FREQUENT DEPRESSION/ STRESS/ANXIETY*	22.8	22.6	17.5	13.6	6.9	7.6	6.6	14.8
DIABETES*	13.6	12.9	10.2	9.4	6.2	5.5	6.8	9.6
FALLS/ ACCIDENTS*	16.8	16.4	11.6	8.6	6.7	4.8	2.7	10.1
KIDNEY PROBLEMS*	17.0	13.7	12.7	6.5	4.7	3.6	2.2	8.9
HARDENING OF THE ARTERIES*	9.0	13.1	12.9	9.2	5.4	5.6	4.4	9.4
CANCER	5.2	6.6	6.8	6.0	6.3	5.2	4.8	6.0
DIFFICULTY UNDERSTANDING INSTRUCTIONS*	12.7	10.2	6.1	3.3	3.0	1.2	.6	5.4

TABLE 4-43 CONTINUED
PREVALENCE OF CHRONIC HEALTH PROBLEMS BY HOUSEHOLD INCOME (ALL ELDERS)

	Percentage of Elders in Income Group							
Health Problem	$0-3999	$4000-6999	$7000-9999	$10000-14999	$15000-19999	$20000 29999	$30000 +	All
STROKE*	3.1	7.6	5.7	5.1	1.9	1.8	3.3	4.7
DIFFICULTY TALKING	2.5	2.3	1.7	1.5	1.0	.9	1.3	1.6
OTHER EMOTIONAL PROBLEMS	1.6	1.9	1.7	1.2	.4	.5	.8	1.3
PARKINSON'S DISEASE	.4	1.1	.9	.9	.5	1.6	.3	.9
ALZHEIMER'S DISEASE	1.2	.5	.5	.8	.2	.4	.5	.6
Number	317	1002	780	844	510	453	530	4436

*Chi square significant at the .0001 level.

Prevalence of the following health problems differs significantly by sex: arthritis, high blood pressure, hearing problems, heart condition, eye diseases, dental problems, difficulty remembering events, frequent depression/stress/anxiety, falls/accidents, kidney problems, and difficulty understanding instructions. In all instances, female elders had higher prevalence rates, except for difficulty hearing and heart condition. Many of these differences may be the result of the older average age of females in the study.

Prevalence of the following chronic health problems differs significantly by race: arthritis, high blood pressure, difficulty hearing, eye diseases, difficulty breathing, dental problems, difficulty remembering, depression/stress/anxiety, diabetes, kidney problems, hardening of the arteries, cancer, and difficulty understanding instructions. For all these conditions, black elders report higher prevalences than white elders, except for difficulty hearing, hardening of the arteries, and cancer.

Prevalence rates for all chronic health conditions differ significantly by age, with the exception of depression/stress/-anxiety and cancer. As would be expected, the older the elder the higher the rate of chronic health problems. One interesting finding is a drop in the prevalence of diabetes in the oldest of the old (85 or over). This group had the lowest rate of diabetes of any age cohort except those under 60. This finding is consistent with the pattern identified in other states. Another interesting finding is that prevalence of emotional problems other than depression, stress, or anxiety remains very constant until age 85, when it goes up significantly.

Prevalence of chronic health problems differs significantly by household income for all problems except cancer, difficulty talking, other emotional problems, Parkinson's disease, and Alzheimer's disease. In general, the lower the household income, the higher the prevalence of chronic health problems.

Summary

The most common health problems for elders in Arkansas, and in the rest of the country, are arthritis and high blood pressure. Compared to other regions, Region VIII elders report fewest health problems. Female elders report more health problems than male elders, black elders report more health problems than white elders, older elders report more health problems than younger

elders, and lower income elders report more health problems than higher income elders.

4.2.4.3 Professional Diagnosis of Health Problems

Respondents were also asked whether health problems had been professionally diagnosed. See Table 4-44 for a breakdown by state and region of the percentage of health problems that have been professionally diagnosed.

TABLE 4-44
PROFESSIONAL DIAGNOSIS OF CHRONIC HEALTH PROBLEMS BY STATE AND AAA REGION
(ALL ELDERS)

Health Problem	Diagnosed Cases as a Percentage of All Reported Cases in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
CANCER	95.6	100.	100.	96.1	100.	100.	100.	98.0	98.8
Number	39	45	42	42	48	40	42	43	340
HIGH BLOOD PRESSURE	98.9	97.4	99.4	98.5	99.1	97.5	97.8	100.	98.6
Number	233	269	298	355	269	223	282	242	2170
DIABETES	100.	97.1	100.	96.8	98.6	98.3	97.6	100.	98.5
Number	74	74	82	81	59	50	66	62	550
HEART CONDITION*	98.5	98.2	98.9	96.6	99.6	94.6	98.0	99.4	98.0
Number	169	165	154	153	194	158	176	135	1303
STROKE	97.9	93.9	100.	100.	96.5	100.	100.	97.4	97.8
Number	41	42	27	26	47	26	29	33	272
EYE DISEASES	98.3	94.7	96.8	96.5	97.7	93.7	97.6	100.	96.9
Number	126	138	160	136	163	110	127	103	1064
DIFFICULTY BREATHING*	81.6	89.5	92.8	93.1	85.0	90.4	87.9	93.5	89.4
Number	103	135	137	105	110	117	101	112	919
KIDNEY PROBLEMS	82.0	81.4	94.3	88.1	92.6	91.8	88.5	92.1	88.7
Number	60	69	68	87	67	52	59	55	517

TABLE 4-44 CONTINUED
PROFESSIONAL DIAGNOSIS OF CHRONIC HEALTH PROBLEMS BY STATE AND AAA REGION
(ALL ELDERS)

Health Problem	Diagnosed Cases as a Percentage of All Reported Cases in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
ARTHRITIS	87.1	87.8	84.6	87.4	88.6	83.8	88.2	89.6	87.2
Number	363	378	387	389	350	290	342	294	2793
PARKINSON'S DISEASE	100.	100.	90.0	91.8	75.0	82.4	76.1	75.0	85.8
Number	5	1	9	10	3	7	8	3	46
HARDENING OF THE ARTERIES*	81.8	79.9	89.0	74.0	86.4	82.0	88.6	98.1	84.3
Number	68	75	66	69	67	57	60	46	509
DIFFICULTY TALKING	92.9	71.1	77.8	86.2	75.0	61.9	50.2	71.4	74.0
Number	12	16	8	15	7	9	12	6	85
OTHER EMOTIONAL PROBLEMS	52.6	74.2	62.1	73.0	90.2	60.0	61.0	75.0	69.5
Number	8	13	12	10	8	4	5	7	68
DENTAL PROBLEMS*	63.4	62.2	64.3	73.0	75.9	76.9	63.5	76.0	69.0
Number	96	102	143	130	112	91	113	77	865
ALZHEIMER'S DISEASE	66.7	73.3	57.1	79.4	-	-	72.9	100.	66.8
Number	5	6	6	4	1	1	4	2	29
DIFFICULTY HEARING*	71.4	58.6	58.6	62.7	68.6	66.5	72.0	71.8	65.8
Number	174	197	197	188	161	158	155	147	1375

TABLE 4-44 CONTINUED
PROFESSIONAL DIAGNOSIS OF CHRONIC HEALTH PROBLEMS BY STATE AND AAA REGION
(ALL ELDERS)

Health Problem	Diagnosed Cases as a Percentage of All Reported Cases in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
FREQUENT DEPRESSION/ STRESS/ANXIETY	55.0	64.2	52.8	56.0	51.1	51.5	58.8	61.6	56.4
Number	95	114	125	101	99	85	102	80	800
DIFFICULTY REMEMBERING	31.8	28.2	26.2	21.5	20.6	17.3	28.3	37.7	25.8
Number	85	111	143	117	97	99	105	63	821

*Chi square significant at the .05 level.

The chronic health conditions reported by elders that are most likely to have been professionally diagnosed are: cancer, high blood pressure, diabetes, and heart condition. The conditions reported by elders that are least likely to have been professionally diagnosed are: difficulty remembering events, frequent depression, stress, or anxiety, difficulty hearing, Alzheimer's Disease, and dental problems.

Percentage of reported problems that are professionally diagnosed differs significantly by region for only five chronic health problems. Difficulty hearing is more likely to have been professionally diagnosed in Regions VII, VIII, and I, and less likely to have been professionally diagnosed in Regions II and III. Heart condition is more likely to have been diagnosed in Regions V and VIII, and least likely to have been diagnosed in Region VI. Difficulty breathing is more likely to have been diagnosed in

Regions IV and VIII, and least likely to have been diagnosed in Region I. Dental problems are more likely to have been diagnosed in Regions VI and VIII, and least likely to have been diagnosed in Region II. Hardening of the arteries is most likely to have been diagnosed in Region VIII, and least likely to have been diagnosed in Region IV. The only consistent pattern here is that elders who report chronic health problems in Region VIII are most likely to have received a professional diagnosis of the problem.

Table 4-45 provides a breakdown of professional diagnosis of health problems by income.

TABLE 4-45
PROFESSIONAL DIAGNOSIS OF CHRONIC HEALTH PROBLEMS BY HOUSEHOLD INCOME (ALL ELDERS)

	Diagnosed Cases as a Percentage of All Reported Cases in Income Group							
Health Problem	$0-3999	$4000-6999	$7000-9999	$10000-14999	$15000-19999	$20000 29999	$30000 +	All
CANCER	90.4	98.7	100.	100.	100.	100.	96.6	98.8
Number	17	66	53	51	32	23	26	268
HIGH BLOOD PRESSURE	97.1	98.3	98.5	99.1	99.4	98.5	97.9	98.5
Number	147	449	312	288	148	136	141	1620
DIABETES	93.9	98.7	98.4	99.0	100.	100.	100.	98.5
Number	43	129	80	79	32	25	36	424
HEART CONDITION	96.9	96.8	97.7	99.0	98.9	100.	100.	98.0
Number	86	298	223	176	72	73	72	1001
STROKE	100.	96.6	96.3	100.	91.0	100.	100.	97.5
Number	10	75	44	43	10	8	17	208
EYE DISEASES	96.7	95.7	94.5	97.9	98.4	100.	94.9	96.4
Number	75	288	149	170	53	49	42	827
DIFFICULTY BREATHING	85.3	84.0	90.5	92.7	93.5	94.1	90.9	88.7
Number	68	246	177	112	66	41	37	747
KIDNEY PROBLEMS	95.1	86.3	88.3	87.7	96.4	92.0	69.9	88.5
Number	52	137	99	55	24	16	11	395

TABLE 4-45 CONTINUED
PROFESSIONAL DIAGNOSIS OF CHRONIC HEALTH PROBLEMS BY HOUSEHOLD INCOME
(ALL ELDERS)

	Diagnosed Cases as a Percentage of All Reported Cases in Income Group							
Health Problem	$0-3999	$4000-6999	$7000-9999	$10000-14999	$15000-19999	$20000 29999	$30000 +	All
ARTHRITIS	85.7	87.0	88.0	87.9	89.7	83.7	84.9	87.1
Number	193	622	403	408	204	164	140	2134
PARKINSON'S DISEASE	100.	81.5	100.	88.9	67.0	81.9	100.	86.9
Number	1	10	7	7	2	7	2	37
HARDENING OF THE ARTERIES	85.6	84.2	84.8	79.8	75.2	96.9	87.7	84.0
Number	29	131	101	78	26	26	23	414
DIFFICULTY TALKING	49.5	81.5	46.5	92.5	100.	59.7	75.1	73.1
Number	8	23	12	11	5	4	7	71
OTHER EMOTIONAL PROBLEMS	51.2	66.1	67.7	79.0	100.	66.1	80.2	69.7
Number	5	19	13	10	2	2	4	56
DENTAL PROBLEMS**	58.8	59.1	61.0	77.4	74.0	92.2	76.4	65.2
Number	83	236	152	98	35	27	34	665
ALZHEIMER'S DISEASE	54.2	19.5	100.	70.1	-	100.	100.	65.6
Number	4	4	4	6	1	2	3	23
DIFFICULTY HEARING**	65.8	58.4	59.1	70.2	78.1	75.5	75.1	65.5
Number	100	314	213	204	88	82	71	1071

TABLE 4-45 CONTINUED
PROFESSIONAL DIAGNOSIS OF CHRONIC HEALTH PROBLEMS
BY HOUSEHOLD INCOME
(ALL ELDERS)

Health Problem	Diagnosed Cases as a Percentage of All Reported Cases in Income Group							
	$0-3999	$4000-6999	$7000-9999	$10000-14999	$15000-19999	$20000 29999	$30000 +	All
FREQUENT DEPRESSION/ STRESS/ANXIETY*	52.2	48.7	50.7	66.5	67.3	59.1	72.7	55.5
Number	72	226	135	115	34	34	35	651
DIFFICULTY REMEMBERING	18.7	22.3	20.8	31.9	24.7	32.4	35.1	24.5
Number	81	244	134	99	38	46	34	677

*Chi square significant at the .01 level.
**Chi square significant at the .001 level.

Percentage of reported problems that are professionally diagnosed varies significantly by income for only three chronic health problems: dental problems, difficulty hearing, and frequent depression, stress, or anxiety. Elders with higher incomes are more likely to have had these problems diagnosed than are lower income elders.

Summary

The chronic health problems reported by elders that are most likely to have been professionally diagnosed are: cancer, high blood pressure, diabetes, and heart condition. Least likely to have been professionally diagnosed is difficulty remembering events. Likelihood of professional diagnosis of difficulty hearing, heart condition, difficulty breathing, dental problems,

and hardening of the arteries differs significantly by region. Elders in Region VIII who report these chronic health problems are more likely to have received a professional diagnosis than are elders in other regions. Likelihood of professional diagnosis of dental problems, difficulty hearing, and frequent depression, anxiety, or stress differs significantly by income, with higher income elders who report these problems being more likely to have received a professional diagnosis than lower income elders who report the same problems.

4.2.4.4 Level of Restriction from Health Problems

Finally, respondents were asked how often the health problem restricts or limits the elder. See Table 4-46 for a breakdown by state and region of the impact of health problems on elders.

TABLE 4-46
IMPACT OF HEALTH PROBLEMS BY STATE AND AAA REGION
(ALL ELDERS)

FREQUENCY OF RESTRICTION	% of Elders Reporting Problem in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
BREATHING									
Never	28.2	26.4	28.4	26.8	33.3	26.3	20.8	29.5	27.5
Occasionally	45.6	47.8	45.4	43.0	34.4	46.7	44.0	44.2	44.1
Frequently	19.1	17.8	15.3	19.3	19.1	13.9	24.4	19.8	18.4
Constantly	7.1	8.0	10.9	10.9	13.2	13.1	10.8	6.6	10.1
Number	104	135	135	107	109	118	102	111	920
HEARING									
Never	59.9	52.7	53.3	53.8	51.7	54.6	51.7	56.1	54.2
Occasionally	28.2	33.8	30.8	22.3	31.5	29.2	32.8	34.0	30.2
Frequently	5.4	8.3	8.5	13.8	11.9	10.3	9.6	3.0	8.9
Constantly	6.4	5.2	7.4	10.0	4.9	5.8	5.8	6.9	6.6
Number	174	197	193	184	162	154	151	144	1359
REMEMBERING EVENTS									
Never	53.7	63.0	66.3	55.1	70.1	70.9	53.1	58.4	61.7
Occasionally	29.8	26.8	19.9	32.7	24.7	22.6	32.1	27.7	26.8
Frequently	10.1	6.7	8.0	9.7	3.5	3.0	9.7	8.0	7.4
Constantly	6.4	3.5	5.8	2.5	1.7	3.5	5.1	5.8	4.2
Number	81	109	140	118	95	99	103	59	804
TALKING									
Never	28.6	34.2	55.6	36.9	42.9	42.9	24.4	28.6	35.5
Occasionally	25.0	28.9	22.2	19.6	28.6	19.0	56.3	57.1	31.0
Frequently	17.9	5.3	-	18.9	14.3	19.0	19.3	-	12.8
Constantly	28.6	31.6	22.2	24.7	14.3	19.0	-	14.3	20.6
Number	12	16	8	15	6	9	13	6	85
UNDERSTANDING INSTRUCTIONS									
Never	33.3	32.6	45.5	36.0	51.4	49.2	28.3	23.3	37.8
Occasionally	55.1	34.8	31.1	38.6	37.8	39.3	56.7	55.8	42.0
Frequently	5.8	10.9	10.6	10.1	7.2	4.9	10.1	-	8.4
Constantly	5.8	21.7	12.9	15.3	3.6	6.6	4.9	20.9	11.8
Number	30	40	57	41	23	26	38	18	272

TABLE 4-46 (CONT.)
IMPACT OF HEALTH PROBLEMS BY STATE AND AAA REGION
(ALL ELDERS)

FREQUENCY OF RESTRICTION	% of Elders Reporting Problem in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
DEPRESSION/ STRESS									
Never	47.7	57.1	64.6	46.7	58.9	61.5	56.1	56.0	56.2
Occasionally	32.1	27.6	19.9	37.7	35.6	29.7	28.5	33.1	30.1
Frequently	16.5	9.6	10.8	10.6	2.9	8.9	12.2	9.1	10.1
Constantly	3.7	5.7	4.7	5.0	2.5	-	3.2	1.7	3.5
Number	94	112	119	100	98	83	101	75	782
OTHER EMOTIONAL PROBLEMS									
Never	36.8	25.8	7.4	21.5	36.6	40.0	-	85.7	29.3
Occasionally	15.8	41.9	25.9	36.3	63.4	20.0	61.0	14.3	35.3
Frequently	21.1	22.6	48.1	11.7	-	20.0	22.0	-	20.2
Constantly	26.3	9.7	18.5	30.5	-	20.0	17.0	-	15.3
Number	8	13	12	9	8	4	5	6	66
TEETH/DENTURES/ GUMS									
Never	41.5	55.8	56.0	54.6	53.1	62.7	55.0	63.1	55.0
Occasionally	35.3	31.6	26.6	31.7	30.3	25.9	28.3	22.3	29.2
Frequently	15.2	6.9	11.9	7.0	12.5	9.0	10.1	10.1	10.3
Constantly	8.0	5.6	5.5	6.6	4.0	2.4	6.6	4.5	5.5
Number	96	99	141	130	112	91	110	77	857
ALZHEIMER'S DISEASE									
Never	-	-	28.6	46.0	-	-	-	-	13.3
Occasionally	-	-	-	16.1	-	50.0	-	-	5.5
Frequently	16.7	26.7	14.3	21.9	-	-	27.1	50.0	21.5
Constantly	83.3	73.3	57.1	16.1	-	50.0	72.9	50.0	59.7
Number	5	6	6	5	-	2	4	2	30
EYE DISEASES									
Never	53.6	54.2	44.4	52.6	51.0	56.2	45.8	51.3	50.9
Occasionally	25.9	18.8	30.1	23.0	20.7	24.7	27.6	23.1	24.2
Frequently	10.6	19.7	17.5	11.8	15.1	12.0	20.1	17.9	15.6
Constantly	9.9	7.2	7.9	12.7	13.3	7.2	6.5	7.7	9.3
Number	126	137	157	136	163	108	124	101	1051

TABLE 4-46 (CONT.)
IMPACT OF HEALTH PROBLEMS BY STATE AND AAA REGION
(ALL ELDERS)

FREQUENCY OF RESTRICTION	I	II	III	IV	V	VI	VII	VIII	AR
	% of Elders Reporting Problem in Region/State								
PARKINSON'S DISEASE									
Never	18.2	-	35.0	40.5	25.0	17.6	62.5	66.7	36.8
Occasionally	36.4	-	35.0	34.8	-	47.1	13.5	33.3	30.1
Frequently	45.5	-	20.0	10.0	50.0	35.3	23.9	-	24.1
Constantly	-	100.	10.0	14.7	25.0	-	-	-	9.0
Number	5	1	9	11	3	7	8	3	46
KIDNEY PROBLEMS									
Never	42.9	54.4	42.5	49.0	56.5	46.3	46.3	54.4	49.2
Occasionally	30.1	40.5	36.6	32.6	30.2	35.5	38.5	28.8	34.1
Frequently	18.8	1.3	13.1	12.1	9.3	11.6	9.6	11.2	10.7
Constantly	8.3	3.8	7.8	6.3	4.0	6.6	5.6	5.6	6.0
Number	57	68	66	87	67	52	58	54	509
HEART CONDITION									
Never	34.7	37.3	37.0	40.3	38.3	44.2	38.7	38.9	38.6
Occasionally	41.1	34.9	39.9	31.1	34.3	26.8	37.7	39.5	35.6
Frequently	13.9	19.0	14.0	16.1	15.6	16.5	15.4	13.7	15.6
Constantly	10.3	8.8	9.0	12.5	11.8	12.5	8.1	8.0	10.2
Number	163	160	147	152	194	159	174	135	1285
HARDENING ARTERIES									
Never	48.3	53.2	52.1	50.2	52.5	33.6	42.3	43.3	47.5
Occasionally	33.8	24.6	21.8	24.4	30.1	41.2	24.6	26.0	28.2
Frequently	12.4	15.8	12.7	15.3	11.3	16.0	18.2	10.6	14.1
Constantly	5.5	6.4	13.4	10.1	6.0	9.2	14.9	20.2	10.2
Number	62	74	61	68	69	56	59	45	494
HIGH BLOOD PRESSURE									
Never	74.1	76.5	69.8	71.3	78.2	72.5	67.6	78.8	73.4
Occasionally	19.3	15.4	23.5	19.9	15.0	20.6	23.7	16.5	19.3
Frequently	4.0	3.4	4.8	5.4	4.3	4.5	6.0	3.1	4.5
Constantly	2.7	4.7	1.9	3.5	2.5	2.4	2.8	1.6	2.8
Number	227	265	295	354	266	219	277	239	2143

TABLE 4-46 (CONT.)
IMPACT OF HEALTH PROBLEMS BY STATE AND AAA REGION
(ALL ELDERS)

FREQUENCY OF RESTRICTION	% of Elders Reporting Problem in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
CANCER*									
Never	83.0	62.5	70.8	69.3	78.2	90.3	75.9	64.0	74.0
Occasionally	5.7	20.2	12.5	14.2	10.7	3.2	10.5	12.0	11.3
Frequently	4.5	-	7.3	10.7	1.7	6.5	5.3	19.0	6.8
Constantly	6.8	17.3	9.4	5.8	9.4	-	8.3	5.0	7.9
Number	38	45	41	41	48	40	38	43	334
STROKE									
Never	34.0	32.7	7.9	29.2	28.8	29.5	32.0	50.7	31.1
Occasionally	37.2	29.6	42.9	20.3	34.7	44.3	26.0	31.0	33.3
Frequently	8.5	15.3	25.4	32.9	20.3	13.1	6.3	9.9	16.0
Constantly	20.2	22.4	23.8	17.6	16.2	13.1	35.6	8.5	19.7
Number	40	42	27	26	46	26	29	31	268
ARTHRITIS									
Never	39.5	43.9	41.7	42.0	40.7	43.1	44.1	45.6	42.5
Occasionally	42.2	34.5	34.2	35.8	35.2	31.3	33.4	32.5	35.1
Frequently	13.5	14.4	16.2	15.0	17.3	16.6	16.2	13.9	15.4
Constantly	4.9	7.3	7.8	7.1	6.9	9.0	6.4	8.0	7.1
Number	361	379	384	385	349	288	339	291	2776
DIABETES**									
Never	52.6	59.5	65.2	52.7	66.0	57.5	41.5	73.6	58.3
Occasionally	25.1	25.4	30.5	22.5	14.9	27.4	37.3	16.4	25.2
Frequently	11.1	8.7	4.3	19.3	14.2	7.1	12.2	3.6	10.3
Constantly	11.1	6.4	-	5.5	4.9	8.0	9.1	6.4	6.3
Number	74	74	80	81	59	49	66	60	544

*Chi square significant at the .05 level.
**Chi square significant at the .01 level.

For most chronic health conditions, level of restriction follows the classic distribution pattern in which more people with the condition experience no restriction than experience occasional restriction, more people experience occasional restriction than experience frequent restriction, and more people experience frequent restriction than experience constant restriction. Alzheimer's Disease is a major exception. The majority of elders with this disease are constantly restricted. Other exceptions are difficulty breathing, difficulty understanding instructions, stroke, and emotional problems other than stress/depression/anxiety. For each of these conditions, more elders are occasionally restricted than are never restricted. For only two conditions does level of restriction differ significantly by region of residence: diabetes and cancer. On the average, elders with diabetes are least restricted in Region VIII and most restricted in Region I, and elders with cancer are least restricted in Region VI and most restricted in Region II.

Summary

For most chronic health problems, the largest proportion of elders experience no restriction, a somewhat smaller proportion of elders experience occasional restriction, an even smaller proportion experience frequent restriction, and the smallest proportion experience constant restriction. Alzheimer's Disease is a major exception to this classic pattern. The majority of elders with this disease are constantly restricted.

4.2.5 Medical and Social Services Used/Needed

Respondents were asked whether any elders in their household were currently using, or needed but were not currently receiving, any of eleven medical or social services. In addition, respondents were asked about difficulty with, or need for, two other services:

whether any elder has trouble getting transportation to go places they need or want to go, and whether any elder has physical or mental health difficulties such that there is a need to move to a nursing home or other facility where continual assistance is available. See Table 4-47 for a breakdown by state and region of the percentage of elders currently using or needing a service.

TABLE 4-47
CURRENT USE AND NEED FOR SERVICES BY STATE AND AAA REGION (ALL ELDERS)

	Percentage of Elders in Region/State								
Services	I	II	III	IV	V	VI	VII	VIII	AR
LEGAL SERVICES									
Current Use	7.3	4.2	6.2	6.6	6.6	7.9	5.5	5.7	6.2
Unmet Need	2.8	4.1	2.7	2.8	3.2	3.6	2.7	4.9	3.3
Total Need	10.1	8.3	8.9	9.4	9.8	11.5	8.2	10.6	9.5
CASE MANAGEMENT**									
Current Use	3.5	4.8	4.8	4.0	2.4	3.5	4.8	2.2	3.8
Unmet Need	2.1	3.6	5.9	4.9	3.0	3.4	7.0	3.1	4.1
Total Need	5.6	8.4	10.7	8.9	5.4	6.9	11.8	5.3	7.9
TRANSPORTATION									
Unmet Need	2.2	2.6	4.1	3.1	2.4	2.4	2.9	2.6	2.8
NOON MEAL AT SENIOR CENTER**									
Current Use	3.6	4.9	2.9	2.7	3.1	5.7	5.2	7.4	4.4
Unmet Need	.3	.8	1.9	1.5	1.2	.8	1.7	.8	1.1
Total Need	3.9	5.7	4.8	4.2	4.3	6.5	6.9	8.2	5.5
HEALTH EDUCATION OR ACTIVITY PROGRAM									
Current Use	1.6	2.5	3.0	1.7	3.7	2.6	2.0	2.7	2.5
Unmet Need	.4	.7	1.6	1.3	1.2	.8	1.6	1.4	1.1
Total Need	2.0	3.2	4.6	3.0	4.9	3.4	3.6	4.1	3.6
HOME-DELIVERED NOON MEAL									
Current Use	.8	.8	.9	.9	.8	2.0	1.1	1.7	1.1
Unmet Need	.4	.9	2.3	1.2	1.4	1.0	1.3	.8	1.2
Total Need	1.2	1.7	3.2	2.1	2.2	3.0	2.4	2.5	2.3
COUNSELING									
Current Use	.3	1.0	1.1	1.5	1.3	1.0	1.1	.8	1.0
Unmet Need	.9	.8	2.0	.9	1.2	1.0	1.7	1.9	1.3
Total Need	1.2	1.8	3.1	2.4	2.5	2.0	2.8	2.7	2.3

TABLE 4-47 (CONT.)
CURRENT USE AND NEED FOR SERVICES
BY STATE AND AAA REGION
(ALL ELDERS)

	Percentage of Elders in Region/State								
Services	I	II	III	IV	V	VI	VII	VIII	AR
IN-HOME SKILLED NURSING									
Current Use	1.1	1.1	1.4	1.2	2.3	1.3	1.3	1.2	1.4
Unmet Need	.9	.2	1.4	.5	.7	.5	1.1	.9	.8
Total Need	2.0	1.3	2.8	1.7	3.0	1.8	2.4	2.1	2.2
EMPLOYMENT TRAINING*									
Current Use	.6	.5	.3	.8	1.5	.5	.9	1.2	.8
Unmet Need	.2	-	1.2	1.1	.7	.9	.6	.6	.7
Total Need	.8	.5	1.5	1.9	2.2	1.4	1.5	1.8	1.5
RESPITE CARE									
Current Use	.2	.4	1.0	.5	.5	.8	.5	.1	.5
Unmet Need	.7	.9	1.1	1.1	.7	.3	1.2	.4	.8
Total Need	.9	1.3	2.1	1.6	1.2	1.1	1.7	.5	1.3
NURSING HOME									
May Need	.8	.8	1.4	.9	1.4	.7	1.7	1.1	1.1
DAY CARE									
Current Use	.2	.4	.1	.1	.1	.1	.1	.4	.2
Unmet Need	.2	.2	.4	.8	.5	.3	.4	.4	.4
Total Need	.4	.6	.5	.9	.6	.4	.5	.8	.6
CAREGIVER SUPPORT GROUP									
Current Use	-	.2	.1	.3	.2	-	.1	.1	.1
Unmet Need	.5	.2	.4	.5	.3	.1	.2	.2	.3
Total Need	.5	.4	.5	.8	.5	.1	.3	.3	.4
Number	769	774	792	811	786	674	734	728	6068

*Chi square significant at the .05 level.
**Chi square significant at the .0001 level.

Elders report the greatest total need for, and current use of, legal services. They report the greatest unmet need for case management services. Use/need of three services differed significantly by region of residence: case management, a noon meal at a senior center, and employment training. Region VII reports the highest total need for case management services, and Region VIII the lowest. Region VII also has the highest unmet need for case management services. Region VIII reports the highest total need for noon meals at a senior center, and Region I the lowest. Region III has the highest unmet need for noon meals at a senior center. Region V reports the highest total need for employment training, and Region II the lowest. Region III has the highest unmet need for employment training.

Table 4-48 provides a breakdown of current use and need for services by age cohort.

TABLE 4-48
CURRENT USE AND NEED FOR SERVICES BY AGE COHORT
(ALL ELDERS)

	PERCENTAGE OF ELDERS IN AGE COHORT							
SERVICES	55-59	60-64	65-69	70-74	75-79	80-84	85+	ALL
LEGAL SERVICES								
Current Use	6.4	6.2	5.9	6.5	5.6	7.3	5.6	6.2
Unmet Need	5.2	2.5	3.0	3.1	2.8	3.6	2.3	3.3
Total Need	11.6	8.7	8.9	9.6	8.4	10.9	7.9	9.5
CASE MANAGEMENT**								
Current Use	1.5	2.3	3.1	4.0	5.5	6.2	12.8	3.8
Unmet Need	3.1	2.7	2.8	4.8	5.1	6.5	11.2	4.1
Total Need	4.6	5.0	5.9	8.8	10.6	12.7	24.0	7.9
TRANSPORTATION**								
Unmet Need	1.8	1.7	2.2	3.3	4.2	4.7	6.1	2.8
NOON MEAL AT SENIOR CENTER**								
Current Use	.8	2.0	5.5	5.5	7.8	7.4	8.5	4.4
Unmet Need	.8	.4	1.2	1.7	1.3	1.6	2.7	1.1
Total Need	1.6	2.4	6.7	7.2	9.1	9.0	11.2	5.5
HEALTH EDUCATION OR ACTIVITY PROGRAM								
Current Use	2.9	2.8	3.0	2.1	2.1	1.6	.6	2.5
Unmet Need	1.6	.8	1.3	1.1	.6	1.4	1.3	1.1
Total Need	4.5	3.6	4.3	3.2	2.7	3.0	1.9	3.6
HOME-DELIVERED NOON MEAL**								
Current Use	.2	.2	.8	.8	2.5	2.8	4.9	1.1
Unmet Need	.8	.4	.9	1.1	1.9	2.5	3.4	1.2
Total Need	1.0	.6	1.7	1.9	4.4	5.3	8.3	2.3
COUNSELING*								
Current Use	2.0	1.0	.9	.9	.3	.6	.7	1.0
Unmet Need	1.5	.9	1.5	1.3	.7	2.2	1.7	1.3
Total Need	3.5	1.9	2.4	2.2	1.0	2.8	2.4	2.3

TABLE 4-48 (CONT.)
CURRENT USE AND NEED FOR SERVICES BY AGE COHORT
(ALL ELDERS)

	PERCENTAGE OF ELDERS IN AGE COHORT							
SERVICES	55-59	60-64	65-69	70-74	75-79	80-84	85+	ALL
IN-HOME SKILLED NURSING**								
Current Use	.1	.5	1.0	2.0	1.8	3.5	4.5	1.4
Unmet Need	.6	.6	.8	.7	.9	1.3	1.4	.8
Total Need	.7	1.1	1.8	2.7	2.7	4.8	5.9	2.2
EMPLOYMENT TRAINING**								
Current Use	2.0	1.0	.5	.2	.1	.2	.4	.8
Unmet Need	1.2	.4	1.2	.5	.2	.2	1.0	.7
Total Need	3.2	1.4	1.7	.7	.3	.4	1.4	1.5
RESPITE CARE**								
Current Use	.5	.2	.3	.4	.8	.5	3.3	.5
Unmet Need	1.4	.6	.4	.6	.2	1.3	2.5	.8
Total Need	1.9	.8	.7	1.0	1.0	1.8	5.8	1.3
NURSING HOME**								
May Need	1.0	.6	.7	.6	1.6	2.3	3.9	1.1
DAY CARE**								
Current Use	.1	-	.3	.1	.1	.4	1.3	.2
Unmet Need	.2	.3	.1	.4	.3	.5	2.9	.4
Total Need	.3	.3	.4	.5	.4	.9	4.2	.6
CAREGIVER SUPPORT GROUP								
Current Use	.2	-	.2	.1	.2	.2	-	.1
Unmet Need	.2	.2	.4	.3	.2	.8	.6	.3
Total Need	.4	.2	.6	.4	.4	1.0	.6	.4
Number	1115	1432	1016	1030	763	470	266	6093

*Chi square significant at the .05 level.
**Chi square significant at the .0001 level.

Use/need of services differs significantly by age for all services surveyed except legal services, health education or activity programs, and caregiver support groups. Older elders have a higher rate of utilization of case management services, noon meals at senior centers, home-delivered meals, in-home skilled nursing, respite care, and day care. They also report higher unmet need for these services and for transportation services, as well as higher potential need for nursing home residence. Younger elders have a higher rate of utilization of counseling services and employment training programs, but there is no consistent pattern of difference in reported unmet need for counseling and employment training by age. For most of these services, utilization and need increase (or decrease) gradually with age, but for respite care and day care, utilization and need remain rather constant until after age 85 when there is a significant jump in use and unmet need.

Summary

Elders report the greatest use of legal services and the greatest unmet need for case management services. Use and need for services tends to increase with age except in the cases of counseling and employment training, for which services utilization decreases with age.

4.2.6 Grouped Impairments/Vulnerabilities

Data were grouped to produce measures of more complex combinations of impairments, for example: impairments of mobility, communication, cognition, emotional and psychological well-being, health, independent living, social interaction, and economic security.

4.2.6.1 Mobility Impairment

Extent of physical mobility impairment was measured by totaling "yes" responses to the following items:

Difficulty walking without wheelchair, cane, walker, or help;
Problems with frequent falls or accidents;
Broken bones resulting from falls or accidents.

Extent of transportation difficulty was measured by totaling "yes" responses to the following items:

Difficulty getting places out of walking distance without
    special assistance or special transportation;
Dependency on transportation outside the household, i.e.,
    primary means of transportation either:
        public transportation/cab/bus,
        special transportation/senior citizen or church
            van or bus, or
        friends/family outside household;
Trouble getting transportation to go places the elder needs
    or wants to go.

See Table 4-49 for prevalence of mobility impairment by state and region.

TABLE 4-49
PREVALENCE OF MOBILITY IMPAIRMENT BY STATE AND AAA REGION (ALL ELDERS)

MOBILITY IMPAIRMENT	Percentage of Elders in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
PHYSICAL MOBILITY*									
1 Impairment	12.8	13.2	17.2	14.9	15.4	13.1	15.7	9.7	14.1
2 Impairments	4.6	4.4	4.9	3.4	3.7	3.7	3.1	3.8	4.0
3 Impairments	-	-	.2	-	-	-	-	-	.0
Total									
Impaired	17.4	17.6	22.3	18.3	19.1	16.8	18.8	13.5	18.1
Unimpaired	82.6	82.3	77.7	81.7	80.9	83.2	81.2	86.5	81.9
TRANSPORTATION ACCESS**									
1 Impairment	11.5	11.2	16.9	14.4	14.1	11.5	13.7	9.1	12.9
2 Impairments	3.3	3.6	4.8	6.1	2.8	4.1	3.4	3.5	4.0
3 Impairments	.7	.9	1.4	.1	.5	1.0	1.0	.4	.7
Total									
Impaired	15.5	15.7	23.1	20.6	17.4	16.6	18.1	13.0	17.6
Unimpaired	84.6	84.3	76.9	79.4	82.6	83.4	81.8	87.1	82.4
Number	769	774	792	811	786	674	734	728	6068

*Chi square significant at the .01 level.
**Chi square significant at the .0001 level.

Just over 18% of the elders suffer from one or more of the three physical mobility impairments studied, and just under 18% suffer from one or more of the three transportation access problems studied. For both problems, level of impairment differed significantly by region, with Region III experiencing the greatest impairment and Region VIII the least.

4.2.6.2 Communication Impairment

Extent of communication impairment was measured by totaling "yes" responses to the following items:

Difficulty using the phone without help;
Difficulty writing;
Difficulty reading;
Difficulty hearing;
Difficulty talking;
Eye disease.

See Table 4-50 for prevalence of communication impairment by state and region.

TABLE 4-50
PREVALENCE OF COMMUNICATION IMPAIRMENT BY STATE AND AAA REGION
(ALL ELDERS)

COMMUNICATION IMPAIRMENT*	Percentage of Elders in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
1 Impairment	24.0	25.3	25.2	25.8	24.3	23.2	23.2	20.8	24.0
2 Impairments	7.9	6.8	9.2	7.5	7.4	7.6	8.5	7.0	7.7
3+ Impairments	4.4	6.7	8.4	5.8	6.5	5.2	5.0	3.5	5.7
Total									
Impaired	36.3	38.8	42.8	39.1	38.2	36.0	36.7	31.3	37.4
Unimpaired	63.7	61.2	57.2	60.9	61.8	64.0	63.3	68.8	62.5
Number	769	774	792	811	786	674	734	728	6068

*Chi square significant at the .01 level.

Approximately 37% of the elders suffer from one or more of the communication impairments studied. Level of communication impairment differs significantly by region, with Region III again having the greatest level of impairment and Region VIII having the lowest.

Because reading and writing impairments can be due to lack of education as well as physical or mental impairments, an analysis of variance was calculated which looked at the relationship between communication impairment and region, while statistically controlling for education level. The results indicate that even though education level is a major contributor to communication impairment, when education level is held constant, there is still a statistically significant relationship between communication impairment and region of residence (see Appendix A for more detailed statistics).

4.2.6.3 Cognitive Impairment

Extent of cognitive impairment was measured by totaling "yes" responses to the following items:

Difficulty balancing a checkbook/handling business affairs;
Difficulty remembering events;
Difficulty understanding instructions;
Alzheimer's disease.

See Table 4-51 for prevalence of cognitive impairment by state and region.

TABLE 4-51
PREVALENCE OF COGNITIVE IMPAIRMENT BY STATE AND AAA REGION
(ALL ELDERS)

	Percentage of Elders in Region/State								
COGNITIVE IMPAIRMENT*	I	II	III	IV	V	VI	VII	VIII	AR
1 Impairment	12.0	13.2	17.4	15.6	13.4	15.1	13.2	8.5	13.6
2 Impairments	3.5	4.6	4.3	4.5	3.9	3.9	4.2	2.4	3.9
3+ Impairments	1.0	1.1	2.8	1.0	.6	1.0	1.9	.7	1.3
Total									
Impaired	16.5	18.9	24.5	21.1	17.9	20.0	19.3	11.6	18.8
Unimpaired	83.6	81.1	75.4	79.0	82.2	80.1	80.7	88.4	81.3
Number	769	774	792	811	786	674	734	728	6068

*Chi square significant at the .0001 level.

Almost 19% of the elders suffer from one or more of the four cognitive impairments studied. Level of cognitive impairment differs significantly by region, with Region III having the greatest level of impairment and Region VIII the lowest.

4.2.6.4 Emotional or Psychological Impairment

Extent of emotional/psychological impairment was measured by totaling "yes" responses to the following items:

Problems with frequent depression, stress, or anxiety;
Other emotional problems;
Current use of, or need for, counseling services for problems such as depression, loneliness, stress, or family difficulties.

For an analysis of respondents only, a more sophisticated indicator of emotional/psychological impairment was developed by adding to the previous three items the following three items, which were asked of respondents only:

Feeling lonely quite often;
Feeling dissatisfied or very dissatisfied with their life as a whole;
Considering self worse off than five years ago.

See Tables 4-52 and 4-53 for prevalence of emotional/psychological impairment by state and region.

TABLE 4-52
PREVALENCE OF EMOTIONAL/PSYCHOLOGICAL IMPAIRMENT
BY STATE AND AAA REGION
(ALL ELDERS)

EMOTIONAL/ PSYCHOLOGICAL IMPAIRMENT	Percentage of Elders in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
1 Impairment	12.0	13.2	14.8	11.5	11.5	13.1	14.6	10.2	12.6
2 Impairments	1.5	2.3	2.6	2.0	2.2	1.0	1.1	1.9	1.8
3 Impairments	-	.2	.2	.1	.1	.1	.3	.2	.1
Total									
Impaired	13.5	15.7	17.6	13.6	13.8	14.2	16.0	12.3	14.5
Unimpaired	86.6	84.3	82.5	86.3	86.3	85.8	84.1	87.7	85.4
Number	769	774	792	811	786	674	734	728	6068

TABLE 4-53
PREVALENCE OF EMOTIONAL/PSYCHOLOGICAL IMPAIRMENT BY STATE AND AAA REGION
(ALL RESPONDENTS)

EMOTIONAL/ PSYCHOLOGICAL IMPAIRMENT*	Percentage of Respondents in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
1 Impairment	23.5	27.0	29.9	27.7	23.6	22.8	28.2	21.6	25.7
2 Impairments	6.6	9.2	8.9	6.7	7.9	9.7	10.3	7.6	8.4
3+ Impairments	3.7	5.1	5.7	4.9	4.4	4.2	3.9	4.3	4.5
Total									
Impaired	33.8	41.3	44.5	39.3	35.9	36.7	42.4	33.5	38.6
Unimpaired	66.1	58.7	55.5	60.7	64.0	63.3	57.7	66.4	61.4
Number	486	505	537	540	526	445	497	461	3997

*Chi square significant at the .05 level.

Over 14% of the elders report one or more of the three emotional/psychological impairments studied for all elders, and over 38% of respondents report one or more of the six emotional/psychological impairments studied for respondents only. Level of emotional/psychological impairment differs significantly by region for respondents but not for all elders. Again Region III reports the highest level of impairment and Region VIII the lowest.

4.2.6.5 Chronic Health Impairment

Extent of chronic health impairment was measured by totaling "yes" responses to the following items:

Difficulty breathing;
Difficulty hearing;
Alzheimer's disease;
Eye disease;
Parkinson's disease;
Kidney problems;
Heart condition;
Hardening of the arteries;
Hypertension/High blood pressure;
Cancer;
Stroke;
Arthritis;
Diabetes.

See Table 4-54 for prevalence of chronic health impairment by state and region.

TABLE 4-54
PREVALENCE OF CHRONIC HEALTH IMPAIRMENT BY STATE AND AAA REGION
(ALL ELDERS)

CHRONIC HEALTH IMPAIRMENT	Percentage of Elders in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
1 Impairment	27.8	26.5	26.2	25.2	27.8	26.1	26.8	26.5	26.6
2 Impairments	19.8	20.8	19.8	20.4	20.3	17.2	20.1	18.5	19.7
3 Impairments	13.1	13.0	15.5	16.8	14.4	14.6	13.5	13.5	14.3
4+ Impairments	17.3	20.6	19.1	17.5	17.1	17.5	19.2	14.5	17.9
Total									
Impaired	78.0	80.9	80.5	79.9	79.6	75.4	79.6	73.0	78.5
Unimpaired	22.0	19.2	19.4	20.1	20.4	24.7	20.5	27.0	21.5
Number	769	774	792	811	786	674	734	728	6068

Over three-fourths of all elders report one or more to the thirteen health problems grouped into chronic health impairment, with just over a fourth having one impairment, just under a fifth having two impairments, and just under a third having three or more chronic health impairments. Level of chronic health impairment is not significantly related to region of residence.

4.2.6.6 Impaired Independence

Extent of impairment of independence was analyzed as two separate variables, which were in turn combined into an overall measure. Ability to care for one's physical needs was measured by totaling "yes" responses to the following items:

Difficulty feeding self;
Difficulty dressing or grooming without help;
Difficulty bathing or shampooing without help;
Difficulty in the use of a toilet;
Problems with bowel or bladder accidents;
Difficulty walking or getting around without wheelchairs, canes, walkers, or help from another person.

This index of self care approximates the OARS and Katz indexes for Physical Activities of Daily Living except that it lacks the OARS item for getting in and out of bed.

Extent of impairment of ability to manage independently was measured by totaling "yes" responses to the following items:

Difficulty doing light housework;
Difficulty cooking;
Difficulty doing heavy cleaning or yardwork;
Difficulty balancing a checkbook or handling business affairs;
Difficulty shopping;
Difficulty taking medication in the right amount at the right time;
Difficulty using the telephone without help;
Difficulty doing laundry;
Difficulty getting places out of walking distance without special assistance or special transportation.

This index of independent management approximates the OARS index for Instrumental Activities of Daily Living except that it breaks doing housework into three separate components: light housework, heavy cleaning or yardwork, and laundry. See Table 4-55 for prevalence of impaired independence by state and region.

TABLE 4-55
PREVALENCE OF IMPAIRED INDEPENDENCE BY STATE AND AAA REGION (ALL ELDERS)

IMPAIRED INDEPENDENCE	Percentage of Elders in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
PHYSICAL SELF CARE*									
1 Impairment	9.2	10.2	13.9	11.3	10.1	10.3	11.1	8.2	10.6
2 Impairments	2.7	2.5	3.6	2.2	2.8	2.7	2.2	1.6	2.5
3+ Impairments	3.6	2.9	4.1	5.1	4.5	4.0	5.2	2.3	4.0
Total									
Impaired	15.5	15.6	21.6	18.6	17.4	17.0	18.5	12.1	17.1
Unimpaired	84.5	84.4	78.4	81.3	82.7	83.0	81.5	87.9	82.9
INDEPENDENT MANAGEMENT**									
1 Impairment	17.2	18.6	21.5	16.6	19.5	17.3	14.6	13.7	17.4
2 Impairments	5.7	8.0	7.5	7.3	7.2	7.5	7.8	6.5	7.2
3+ Impairments	12.5	10.3	14.6	13.1	13.6	12.2	13.2	8.8	12.3
Total									
Impaired	35.4	36.9	43.6	37.0	40.3	37.0	35.6	29.0	36.9
Unimpaired	64.7	63.0	56.5	63.0	59.8	62.9	64.4	71.0	63.1
OVERALL INDEPENDENCE***									
1 Impairment	15.1	18.9	20.3	14.9	18.7	16.8	14.8	13.3	16.6
2 Impairments	7.5	7.7	8.4	7.9	6.8	8.0	6.5	6.4	7.4
3+ Impairments	14.4	13.4	18.4	16.4	16.8	15.2	16.9	11.0	15.3
Total									
Impaired	37.0	40.0	47.1	39.2	42.2	40.1	38.2	30.8	39.4
Unimpaired	63.0	60.0	52.9	60.8	57.8	59.9	61.8	69.2	60.6
Number	769	774	792	811	786	674	734	728	6068

*Chi square significant at the .01 level.
**Chi square significant at the .001 level.
***Chi square significant at the .0001 level.

Approximately 17% of elders report one or more of the six ADL difficulties grouped into impairment of physical self care, 37% report one or more of the nine ADL difficulties grouped into impairment of independent management, and almost 40% report one or more impairments when the fifteen activities of daily living are combined into an overall measure of impaired independence. In each case, level of impairment differs significantly by region, and again Region III has the highest levels of impairment and Region VIII the lowest.

Table 4-56 provides a breakdown of impaired independence by age.

TABLE 4-56
PREVALENCE OF IMPAIRED INDEPENDENCE BY AGE COHORT
(ALL ELDERS)

IMPAIRED INDEPENDENCE	PERCENTAGE OF ELDERS IN AGE COHORT							
	55-59	60-64	65-69	70-74	75-79	80-84	85+	ALL
PHYSICAL SELF CARE*								
1 Impairment	6.2	7.1	8.3	11.5	16.3	17.5	24.7	10.6
2 Impairments	1.5	1.2	2.2	2.7	3.6	5.6	7.1	2.6
3+ Impairments	1.7	2.3	2.0	2.7	4.8	9.7	22.8	4.0
Total								
Impaired	9.4	10.5	12.5	16.8	24.7	32.8	54.6	17.1
Unimpaired	90.6	89.5	87.5	83.2	75.3	67.2	45.4	82.9
INDEPENDENT MANAGEMENT*								
1 Impairment	11.9	15.1	17.2	19.3	23.1	23.3	19.5	17.4
2 Impairments	5.0	4.1	6.0	9.0	10.5	12.2	11.4	7.2
3+ Impairments	5.5	7.9	7.6	11.5	18.1	26.7	44.0	12.3
Total								
Impaired	22.5	27.1	30.8	39.8	51.8	62.2	74.8	36.9
Unimpaired	77.5	72.9	69.2	60.2	48.2	37.8	25.2	63.1
OVERALL INDEPENDENCE*								
1 Impairment	10.6	15.3	16.2	20.2	21.8	21.3	14.4	16.7
2 Impairments	5.2	4.4	7.2	7.3	12.1	11.8	12.4	7.4
3+ Impairments	7.7	9.4	9.5	15.5	22.0	32.8	50.9	15.3
Total								
Impaired	23.5	29.2	32.9	43.1	55.8	65.8	77.7	39.4
Unimpaired	76.5	70.8	67.1	56.9	44.2	34.2	22.3	60.6
Number	1115	1432	1016	1030	763	470	266	6093

*Chi square significant at the .0001 level.

All three measures of impaired independence differ significantly by age: the older the age cohort, the greater the level of impairment of ability to physically care for oneself, to manage independently, and overall to live independently.

4.2.6.7 Social Isolation

Extent of social isolation was measured by totaling "yes" responses from respondents to the following items:

Lives alone;
No one to depend upon if sick or disabled;
No family members within one hour's traveling time;
Sees nearby family members less than once a month;
Feels lonely quite often;
No leisure activities other than watching television/reading.

See Table 4-57 for prevalence of respondent social isolation by state and region.

TABLE 4-57
PREVALENCE OF SOCIAL ISOLATION BY STATE AND AAA REGION
(ALL RESPONDENTS)

SOCIAL ISOLATION	Percentage of Respondents in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
1 Impairment	41.1	40.6	39.4	37.9	37.6	34.5	39.4	38.3	38.6
2 Impairments	18.5	15.8	16.5	15.2	13.9	16.0	14.3	11.7	15.3
3+ Impairments	3.6	3.8	4.7	4.9	4.7	5.9	5.8	3.5	4.6
Total									
Impaired	63.2	60.2	60.6	58.0	56.2	56.4	59.5	53.5	58.5
Unimpaired	36.8	39.8	39.4	42.0	43.7	43.6	40.5	46.4	41.5
Number	486	505	537	540	526	445	497	461	3997

Almost 60% of the respondents report one or more of the six aspects of social isolation studied. Almost 40% report only one impairment. Since many of these individuals may have responded only to living alone and not to any other items, more attention should be directed to those with multiple impairments. Level of social isolation does not differ significantly by region of residence.

4.2.6.8 Economic Vulnerability

Extent of economic vulnerability was analyzed in two ways. The broadest measure totaled "yes" responses to the following eleven items, which include measures of low income, limited resources, and high expenses, as well as self-report of financial difficulty.

Unemployed for one of the following reasons:
    Can't find a job,
    Unable to work for health reasons, or
    Needed to care for others in the home;
Rent reduced because of age, disability or income needs;
Not enough money to get by on each month;
Difficulty affording rent or house payment;
Difficulty affording utilities;
Difficulty affording medical or pharmacy bills;
Difficulty affording groceries;
Dependent on public sources for income, that is:
    No employment wages/salary/business income AND
    No retirement/VA/military pension AND
    No private rental income or property/investments/savings;
Dependence on public sources for health insurance, that is:
    No health insurance other than Medicare/Medicaid;
Monthly medical expenses not covered by insurance or Medicare
    over $25;
Annual household income below:
    $ 7,000 for a household of one,
    $10,000 for a household of two or three, or
    $15,000 for a household of four or more.

A narrower measure of economic vulnerability totaled "yes" responses to only the five items of self-reported financial difficulty:

Not enough money to get by on each month;
Difficulty affording rent or house payment;
Difficulty affording utilities;
Difficulty affording medical or pharmacy bills;
Difficulty affording groceries.

See Table 4-58 for prevalence of economic vulnerability by state and region.

TABLE 4-58
PREVALENCE OF ECONOMIC VULNERABILITY BY STATE AND AAA REGION (ALL ELDERS)

ECONOMIC VULNERABILITY	Percentage of Elders in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
BROAD DEFINITION*									
1 Impairmt	33.4	25.7	26.3	31.0	31.5	30.9	27.3	38.1	30.5
2 Impairmts	16.8	19.1	16.8	15.0	15.4	14.9	17.0	15.0	16.3
3 Impairmts	9.4	12.9	12.3	10.5	9.0	8.6	14.2	7.7	10.6
4-5 Impairmts	10.9	11.4	13.5	13.6	10.2	11.4	12.5	8.8	11.6
6+ Impairmts	4.5	6.6	11.6	11.4	7.0	5.2	6.7	3.2	7.1
Total									
Impaired	75.0	75.7	80.4	81.6	73.1	71.0	77.6	72.8	76.0
Unimpaired	25.0	24.3	19.6	18.4	26.9	29.0	22.4	27.2	24.0
SELF-REPORT*									
1 Impairmt	10.8	10.5	13.6	14.3	11.2	9.5	13.6	8.7	11.6
2 Impairmts	3.4	5.9	7.3	6.7	5.0	6.2	6.3	3.6	5.6
3+ Impairmts	5.2	6.7	11.2	13.1	9.4	7.2	9.4	6.0	8.6
Total									
Impaired	19.4	23.1	32.2	34.1	25.7	23.0	29.3	18.2	25.8
Unimpaired	80.6	76.9	67.8	65.9	74.3	77.0	70.7	81.8	74.2
Number	769	774	792	811	786	674	734	728	6068

*Chi square significant at the .0001 level.

Twenty-four percent of the elders studied are free from all eleven impairments grouped into the broader definition of economic vulnerability. Another thirty percent record only one impairment, 16% record two, 10% record three, 11% record four to five, and just over 7% record six or more impairments. Level of economic impairment differs significantly by region, with Region IV having the highest level of impairment, and Region VI having the lowest level.

Three-fourths of the elders report no difficulty in paying for housing, utilities, groceries, or medical/pharmacy bills. Over 11% have difficulty with one of these expenses, another 5% have difficulty in two areas, and over 8% have difficulty in three or more areas.

Summary

Level of impairment differs significantly by region for all grouped functions except emotional/psychological well-being of elders and social interaction of respondents. Region III reports the highest levels of impairment in all areas except economic vulnerability, for which elders in Region IV report the greatest number of difficulties. Region VIII reports the fewest impairments in all functional areas except economic vulnerability, as broadly defined, for which elders in Region VI record the fewest impairments.

4.2.7 Severe Impairment of Grouped Functions

More sophisticated measures of complex problem groupings can be obtained by assessing the level of impairment as well as the breadth of impairment. Level of impairment refers to the frequency of assistance received or the frequency of restriction experienced. Breadth of impairment refers to the number of functional or health problems an elder has.

4.2.7.1 Severe Mobility Impairment

Severe physical mobility impairment was measured by totaling "yes" responses to the following items:

Receiving help daily or more than once a day with walking;
Problems with frequent falls or accidents;
Broken bones resulting from falls or accidents.

Extent of severe transportation difficulty was measured by totaling "yes" responses to the following items:

Receiving help weekly, more than once a week, daily, or more than once a day with getting places out of walking distance;
Dependency on transportation outside the household, i.e., primary means of transportation either:
    public transportation/cab/bus,
    special transportation/senior citizen or church van or bus, or
    friends/family outside household;
Trouble getting transportation to go places the elder needs or wants to go.

See Table 4-59 for prevalence of severe mobility impairment by state and region.

TABLE 4-59
PREVALENCE OF SEVERE MOBILITY IMPAIRMENT BY STATE AND AAA REGION (ALL ELDERS)

MOBILITY IMPAIRMENT	Percentage of Elders in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
PHYSICAL MOBILITY									
1 Severe Imp.	11.3	10.6	12.2	10.3	11.2	9.4	11.3	8.3	10.6
2+ Severe Imps.	1.0	1.4	1.7	.8	1.3	1.8	.8	1.3	1.3
Total									
Severely Impaired	12.3	12.0	13.9	11.1	12.5	11.2	12.1	9.6	11.9
Not Severely Impaired	87.7	88.0	86.0	88.9	87.6	88.8	87.9	90.4	88.1
TRANSPORTATION ACCESS*									
1 Severe Imp.	11.2	11.1	16.2	15.7	12.9	10.1	13.3	9.8	12.6
2+ Severe Imps.	2.2	3.5	4.0	3.6	2.8	4.8	3.5	2.5	3.3
Total									
Severely Impaired	13.4	14.6	20.2	19.3	15.7	14.9	16.8	12.3	15.9
Not Severely Impaired	86.6	85.4	79.8	80.7	84.2	85.1	83.2	87.7	84.0
Number	769	774	792	811	786	674	734	728	6068

*Chi square significant at the .001 level.

Just under 12% of the elders suffer from severe physical mobility impairment, and almost 16% suffer from severe transportation access problems. Prevalence of severe transportation access problems differs significantly by region, with Region III experiencing the greatest impairment and Region VIII the least.

4.2.7.2 Severe Communication Impairment

Extent of severe communication impairment was measured by totaling "yes" responses to the following items:

Receiving help more than once a week, daily, or more than once a day with using the phone;
Receiving help more than once a week, daily, or more than once a day with writing;
Receiving help more than once a week, daily, or more than once a day with reading;
Difficulty hearing that is frequently or constantly restricting;
Difficulty talking that is frequently or constantly restricting;
Eye disease that is frequently or constantly restricting.

See Table 4-60 for prevalence of severe communication impairment by state and region.

TABLE 4-60
PREVALENCE OF SEVERE COMMUNICATION IMPAIRMENT
BY STATE AND AAA REGION
(ALL ELDERS)

	Percentage of Elders in Region/State								
COMMUNICATION IMPAIRMENT*	I	II	III	IV	V	VI	VII	VIII	AR
1 Severe Imp.	4.4	6.4	9.0	8.3	6.9	6.3	6.9	4.5	6.6
2+ Severe Imps.	2.5	3.2	3.4	3.6	3.5	2.0	2.9	2.2	2.9
Total Severely Impaired	6.9	9.6	12.4	11.9	10.4	8.3	9.8	6.7	9.5
Not Severely Impaired	93.2	90.4	87.7	88.1	89.7	91.7	90.2	93.3	90.5
Number	769	774	792	811	786	674	734	728	6068

*Chi square significant at the .01 level.

Just under 10% of the elders suffer from severe communication impairment. Level of severe communication impairment differs significantly by region, with Region III again having the greatest level of impairment and Region VIII having the lowest. Because reading and writing impairments can be due to lack of education as well as physical or mental impairments, an analysis of variance was calculated which looked at the relationship between severe communication impairment and region, while statistically controlling for education level. The results indicate that even though education level is a major contributor to severe communication impairment, when education level is held constant, there is still a statistically significant relationship between severe communication impairment and region of residence.

4.2.7.3 Severe Cognitive Impairment

Extent of severe cognitive impairment was measured by totaling "yes" responses to the following items:

Receiving help weekly, more than once a week, daily, or more than once a day with balancing a checkbook or handling business affairs;
Difficulty remembering events that is frequently or constantly restricting;
Difficulty understanding instructions that is frequently or constantly restricting;
Alzheimer's disease that is frequently or constantly restricting.

See Table 4-61 for prevalence of severe cognitive impairment by state and region.

TABLE 4-61
PREVALENCE OF SEVERE COGNITIVE IMPAIRMENT BY STATE AND AAA REGION (ALL ELDERS)

COGNITIVE IMPAIRMENT*	Percentage of Elders in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
1 Severe Imp.	2.8	4.9	4.6	3.9	3.1	2.5	3.0	2.2	3.4
2+ Severe Imps.	.8	.9	1.6	1.2	.3	.5	1.4	.6	.9
Total Severely Impaired	3.6	5.8	6.2	5.1	3.4	3.0	4.4	2.8	4.3
Not Severely Impaired	96.4	94.2	93.9	94.8	96.6	97.0	95.6	97.1	95.7
Number	769	774	792	811	786	674	734	728	6068

*Chi square significant at the .01 level.

Just over 4% of the elders suffer from severe cognitive impairment. These findings are comparable to other national samples. Prevalence of severe cognitive impairment differs significantly by region, with Region III having the greatest level of impairment and Region VIII the lowest.

4.2.7.4 Severe Emotional/Psychological Impairment

Extent of severe emotional/psychological impairment was measured by totaling "yes" responses to the following items:

Problems with frequent depression, stress, or anxiety that frequently or constantly restrict;
Other emotional problems that frequently or constantly restrict;
Current use of or need for counseling services for problems such as depression, loneliness, stress, or family difficulties.

For an analysis of respondents only, a more sophisticated indicator of severe emotional/psychological impairment was developed by adding to the previous three items the following three items, which were asked of respondents only:

Feeling lonely quite often;
Feeling very dissatisfied with their life as a whole;
Considering self worse off than five years ago.

See Tables 4-62 and 4-63 for prevalence of severe emotional/psychological impairment by state and region.

TABLE 4-62
PREVALENCE OF SEVERE EMOTIONAL/PSYCHOLOGICAL IMPAIRMENT BY STATE AND AAA REGION
(ALL ELDERS)

EMOTIONAL/ PSYCHOLOGICAL IMPAIRMENT	Percentage of Elders in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
1 Severe Imp.	3.1	2.6	3.7	3.4	2.9	2.5	3.9	3.5	3.2
2+ Severe Imps.	.6	.9	1.2	.7	.1	.3	.5	.2	.6
Total Severely Impaired	3.7	3.5	4.9	4.1	3.0	2.8	4.4	3.7	3.8
Not Severely Impaired	96.4	96.5	95.1	95.9	97.0	97.2	95.6	96.3	96.2
Number	769	774	792	811	786	674	734	728	6068

TABLE 4-63
PREVALENCE OF SEVERE EMOTIONAL/PSYCHOLOGICAL IMPAIRMENT BY STATE AND AAA REGION
(ALL RESPONDENTS)

EMOTIONAL/ PSYCHOLOGICAL IMPAIRMENT	Percentage of Respondents in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
1 Severe Imp.	22.9	27.3	31.3	25.2	24.8	26.4	27.7	22.2	26.0
2+ Severe Imps.	5.4	7.5	7.5	7.2	5.5	5.5	6.9	5.9	6.5
Total Severely Impaired	28.3	34.8	38.8	32.4	30.3	31.9	34.6	28.1	32.5
Not severely Impaired	71.7	65.2	61.2	67.6	69.7	68.1	65.4	71.9	67.5
Number	486	505	537	540	526	445	497	461	3997

Almost 4% of the elders report one or more of the severe emotional/psychological impairments studied for all elders, and almost a third of the respondents report one or more of the six severe emotional/psychological impairments studied for respondents only. Level of severe emotional/psychological impairment does not differ significantly by region.

4.2.7.5 Severe Chronic Health Impairment

Extent of severe chronic health impairment was measured by totaling "yes" responses to the following conditions if the condition frequently or constantly restricts the elder:

Difficulty breathing;
Difficulty hearing;
Alzheimer's disease;
Eye disease;
Parkinson's disease;
Kidney problems;
Heart condition;
Hardening of the arteries;
Hypertension/High blood pressure;
Cancer;
Stroke;
Arthritis;
Diabetes.

See Table 4-64 for prevalence of severe chronic health impairment by state and region.

TABLE 4-64
PREVALENCE OF SEVERE CHRONIC HEALTH IMPAIRMENT BY STATE AND AAA REGION (ALL ELDERS)

CHRONIC HEALTH IMPAIRMENT	Percentage of Elders in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
1 Severe Imp.	11.9	14.3	14.3	14.7	13.7	14.2	13.9	11.7	13.6
2+ Severe Imps.	8.5	9.3	9.4	10.2	9.9	8.5	9.6	6.7	9.0
Total									
Severely Impaired	20.4	23.6	23.7	24.9	23.6	22.7	23.5	18.4	22.6
Not Severely Impaired	79.7	76.4	76.3	75.2	76.4	77.3	76.5	81.6	77.4
Number	769	774	792	811	786	674	734	728	6068

Over 20% of all elders suffer from severe chronic health impairment. Level of severe chronic health impairment is not significantly related to region of residence.

Table 4-65 provides a breakdown of severe chronic health impairment by age.

TABLE 4-65
PREVALENCE OF SEVERE CHRONIC HEALTH IMPAIRMENT BY AGE COHORT (ALL ELDERS)

CHRONIC HEALTH IMPAIRMENT*	PERCENTAGE OF ELDERS IN AGE COHORT							
	55-59	60-64	65-69	70-74	75-79	80-84	85+	ALL
1 Severe Imp.	9.5	10.7	13.8	14.2	17.7	18.5	22.4	13.6
2+ Severe Imps.	6.7	7.1	6.5	8.6	11.6	14.2	23.3	9.0
Total								
Severely Impaired	16.1	17.9	20.3	22.8	29.3	32.7	45.7	22.6
Not Severely Impaired	83.9	82.1	79.7	77.2	70.7	67.3	54.3	77.4
Number	1115	1432	1016	1030	763	470	266	6093

*Chi square significant at the .0001 level.

Severe chronic health impairment differs significantly with age. The older the respondent, the greater the likelihood of severe chronic health impairments.

4.2.7.6 Severe Impairment of Independence

Severe impairment of independence was analyzed as two separate variables. Severe impairment of ability to physically care for oneself was measured by totaling "yes" responses to the following items:

Receiving help more than once a day with feeding self;
Receiving help daily or more than once a day with dressing or grooming;
Receiving help more than once a week, daily, or more than once a day with bathing or shampooing;
Receiving help daily or more than once a day in the use of a toilet;
Receiving help more than once a week, daily, or more than once a day with bowel or bladder accidents;
Receiving help daily or more than once a day with walking or getting around.

Severe impairment of ability to manage independently was measured by totaling "yes" responses to the following items:

Receiving help more than once a week, daily, or more than once a day with light housework;
Receiving help daily or more than once a day with cooking;
Receiving help weekly, more than once a week, daily, or more than once a day with heavy cleaning or yardwork;
Receiving help more than once a week, daily, or more than once a day with balancing a checkbook or handling business affairs;
Receiving help more than once a week, daily, or more than once a day with shopping;
Receiving help daily or more than once a day with taking medication in the right amount at the right time;
Receiving help more than once a week, daily, or more than once a day with using the telephone;
Receiving help weekly, more than once a week, daily, or more than daily with laundry;
Receiving help weekly, more than once a week, daily, or more than daily with getting places out of walking distance.

See Table 4-66 for prevalence of severe impaired independence by state and region.

TABLE 4-66
PREVALENCE OF SEVERE IMPAIRED INDEPENDENCE BY STATE AND AAA REGION
(ALL ELDERS)

IMPAIRED INDEPENDENCE	Percentage of Elders in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
PHYSICAL SELF CARE									
1 Severe Imp.	4.0	3.7	5.4	4.0	3.4	3.8	3.9	2.5	3.8
2+ Severe Imps.	2.5	2.4	3.4	3.8	3.9	3.0	3.9	2.4	3.2
Total Severely Impaired	6.5	6.1	8.8	7.8	7.3	6.8	7.8	4.9	7.0
Not Severely Impaired	93.6	93.9	91.1	92.3	92.7	93.2	92.2	95.0	93.0
INDEPENDENT MANAGEMENT*									
1 Severe Imp.	12.1	12.1	15.9	11.3	14.1	12.9	10.5	9.4	12.3
2+ Severe Imps.	7.3	7.7	9.8	8.6	9.2	8.8	8.9	7.3	8.5
Total Severely Impaired	19.4	19.8	25.7	19.9	23.3	21.7	19.4	16.7	20.8
Not Severely Impaired	80.5	80.3	74.3	80.1	76.7	78.3	80.6	83.2	79.2
Number	769	774	792	811	786	674	734	728	6068

*Chi square significant at the .05 level.

Approximately 7% of elders report severe self care impairment, and over 20% report severe impairment of independent living. Prevalence of severe impairment of independent living differs significantly by region, and again Region III has the highest levels of impairment and Region VIII the lowest.

Summary

Level of severe impairment differs significantly for the following grouped functions: transportation access, communication, cognition, and independent management. Region III reports the highest levels

of severe impairment for these grouped functions, and Region VIII reports the lowest levels.

4.2.8 Need for Nursing Home Care

Arkansas recognizes four levels of nursing home care. From least impairment to greatest impairment, they are Intermediate III, Intermediate II, Intermediate I, and Skilled. While the Arkansas Longitudinal Study on Aging and Health does not directly address every criteria for nursing home care, it does provide information about several of the indicators for each level of care. Consequently, it is possible to develop variables which are predictors of potential need for nursing home care.

Eligibility for Intermediate III nursing home care requires that the individual meet more than one of the following criteria:

1. Partially incontinent, capable of maintaining/assisting in personal hygiene following soiling;
2. Ambulatory without devices or with cane, crutch, walker, or wheelchair;
3. Ostomy care;
4. Supervision of minimallly complex treatments/medications;
5. Confused mental status requiring supervision for personal safety;
6. Uncomplicated post-operative care;
7. Minor dietary modifications such as soft, diabetic or modified salt;
8. Institutionalized, but needs could be met with alternative services currently unavailable.

Potential Need for Intermediate III NH Care was measured by totalling "yes" responses to the following queries:

1. Bowel or bladder accidents/no one helps;
2. Difficulty walking/no one helps;
3. Difficulty taking medication in the right amount at the right time;
4. Difficulty understanding instructions OR Alzheimer's disease;
5. Diabetes.

Eligibility for Intermediate II nursing home care requires that the individual meet two or more of the following criteria:

1. Able to feed self with assistance;
2. Partially incontinent, incapable of maintaining personal hygiene following soiling;
3. Requires assistance with ambulation;
4. Palliative skin care;
5. Routine change of surgical dressings;
6. Self-administration of oxygen;
7. Moderate to markedly confused requiring supervision for personal safety or to prevent harm to others;
8. Dietary considerations more complex than soft, diabetic, or modified salt diets.

Potential Need for Intermediate II NH Care was measured by totalling "yes" responses to the following items:

1. Difficulty feeding self/informal, formal or combination of help;
2. Bowel or bladder accidents/informal, formal or combination of help;
3. Difficulty walking/informal, formal or combination of help;
4. Professional nursing care at home/has or needs;
5. Difficulty taking medication in the right amount at the right time OR
   Difficulty understanding instructions OR
   Alzheimer's Disease.

Eligibility for Intermediate I nursing home care requires that the individual meet one or more of the following criteria:

1. Completely unable to feed self;
2. Total incontinence;
3. Total assistance with ambulation;
4. Need for frequent positioning in bed or chair;
5. Total assistance with hygiene required.

Potential Need for Intermediate I NH Care is measured by totalling "yes" responses to the following items:

1. Difficulty feeding self/help more than once a day;
2. Bowel or bladder accidents/help more than once a day or daily;
3. Difficulty walking/help more than once a day OR
   Stroke/completely or constantly restricted OR
   Arthritis/completely or constantly restricted;
4. Difficulty bathing//help more than once a day, daily, or more than once a week.

The Study is least able to detect the need for Skilled nursing home care, which requires that the individual meet all three of the following criteria:

1. Requires skilled nursing services or skilled rehabilitation; services, such as intravenous feedings, intramuscular injections, insertion of catheters, etc.;
2. Such services required on a daily basis;
3. As a practical matter, the skilled services can only be furnished on an inpatient basis in a skilled nursing facility.

An approximation of Potential Need for Skilled NH Care is determined by "yes" responses to all of the following queries:

1. Receives professional nursing care;
2. Problems with breathing, Parkinson's disease, kidneys, heart, hardening of arteries, cancer or stroke/completely or constantly restricted;
3. Needs to move to a nursing home where continual assistance will be available.

See Table 4-67 for a breakdown of potential need for nursing home care by state and region.

TABLE 4-67
POTENTIAL NEED FOR NURSING HOME CARE BY STATE AND AAA REGION (ALL ELDERS)

CARE LEVEL/ Number of Need Criteria Met	Percentage of Elders in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
INTERMEDIATE III*									
None	77.4	77.6	71.4	75.4	78.0	81.1	76.7	82.7	77.4
One	15.9	16.3	20.8	17.9	17.5	14.3	17.8	13.7	16.9
Two or more	6.8	6.1	7.8	6.6	4.6	4.6	5.6	3.6	5.7
INTERMEDIATE II									
None	89.9	89.4	86.3	87.8	89.0	89.7	88.3	92.6	89.1
One	6.9	8.0	10.0	8.9	8.1	8.3	8.5	5.0	8.0
Two or more	3.2	2.6	3.7	3.4	2.9	2.0	3.2	2.4	3.0
INTERMEDIATE I									
None	93.0	92.3	89.7	90.7	91.6	92.6	91.5	93.7	91.8
One	5.3	5.8	8.4	6.6	5.7	5.4	5.8	4.3	5.9
Two or more	1.7	1.9	1.9	2.7	2.7	2.0	2.7	1.9	2.2
SKILLED									
None	93.0	93.6	92.3	93.1	90.9	92.2	91.7	94.9	92.7
One	6.1	5.6	6.8	5.7	7.9	7.1	7.1	4.1	6.3
Two or more	1.0	.9	.8	1.2	1.2	.6	1.2	1.0	1.0
Number	769	774	792	811	786	674	734	728	6068

*Chi square significant at the .001 level.

Just under 6% of the elders in our community-based sample meet the criteria for Level III nursing home care. Half of those elders, or 3% of the total population, meet the criteria for Level II nursing home care. Over two-thirds of those elders, or 2.2% of the total population, meet the criteria for Level I nursing home care. One percent of the elders studied meet two or more of the criteria required for admission to a skilled care facility. Only potential need for Level III care differs significantly by region, with Region III reporting the highest potential need and Region VIII the lowest.

Summary

Just under 6% of the elders in our community-based sample meet the criteria for Level III nursing home care, 3% meet the criteria for Level II care, and just over 2% meet the criteria for Level I care. Only potential need for Level III care differs significantly by region, with Region III reporting the highest potential need and Region VIII the lowest.

4.3 Findings for Respondents Only

Some questions were asked only of the respondent elder. Findings for respondents only include length of residence in Arkansas, support system, frequency of visits to doctors, lifestyle changes, feared illnesses and problems, and current life satisfaction.

4.3.1 Arkansas Residence

Planners are also concerned about the potential effects of in and out-migration in retirement communities and the impact migration might have on future service demands. To help determine migration patterns in the elderly, respondents were asked how many years they had lived in Arkansas. If they had lived in Arkansas less than five years, they were also asked where they had lived before and the reasons they moved to Arkansas. See Table 4-68 for a breakdown by state and region of respondents' residence in Arkansas.

TABLE 4-68
RESIDENCE IN ARKANSAS BY STATE AND AAA REGION
(ALL RESPONDENTS)

RESIDENCE CHARACTERISTIC	Percentage of Respondents in RegionState								
	I	II	III	IV	V	VI	VII	VIII	AR
YEARS IN STATE*									
< 5	2.5	1.8	1.3	.8	1.5	.2	.6	1.0	1.2
5-10	13.2	7.5	2.0	.6	.6	7.0	2.2	3.0	4.4
>10 <25	19.6	15.0	6.1	2.6	4.9	11.0	5.5	10.5	9.2
25-50	15.6	11.9	19.1	11.6	16.6	12.8	13.8	18.0	14.9
>50	49.1	63.8	71.5	84.3	76.3	69.0	77.9	67.6	70.2
MEAN YEARS IN STATE*	43.3	50.3	56.8	61.6	59.4	54.0	59.3	53.6	55.0
Regional Rank (1=Hi,8=Lo)	8	7	4	1	2	5	3	6	
Number	485	504	534	535	526	446	498	464	3992

*Chi square significant at the .0001 level.

The great majority (70%) of respondents have lived in Arkansas for more than fifty years (mean duration of residence is 55 years). Length of residence differs significantly by region, with Region I having the lowest average tenure (43.3 years), and Region IV having the highest average tenure (61.6 years). Region I respondents' relatively recent residence fits with their higher prevalence of residence in retirement communities.

Table 4-69 provides a breakdown of the previous states of residence and reasons for moving to Arkansas of respondents who had lived in the state for less than five years.

TABLE 4-69
PREVIOUS RESIDENCE AND REASONS FOR MOVING TO ARKANSAS OF RECENT ARKANSAS RESIDENTS
(ALL RESPONDENTS)

RESIDENCE CHARACTERISTIC	NUMBER OF RESPONDENTS	PERCENTAGE OF RESPONDENTS
PREVIOUS RESIDENCE		
California	7	15.2
Illinois	5	11.7
Texas	4	9.1
Wisconsin	4	9.1
Oklahoma	3	5.5
Michigan	2	5.2
Colorado	2	4.8
Iowa	2	4.8
Louisiana	2	4.7
Tennessee	2	3.8
Mississippi	2	3.5
New Jersey	1	2.9
New Mexico	1	2.9
New York	1	2.9
Maryland	1	2.7
Arizona	1	1.9
Idaho	1	1.9
Indiana	1	1.9
Kansas	1	1.9
New Mexico	1	1.9
Pennsylvania	1	1.9
Missouri	1	1.7
Total	45	100.0
REASON FOR MOVING TO ARK		
Come home/Be with family/friends	14	29.4
Retired to Arkansas	9	18.1
Care for parent	8	17.3
Moved with spouse/parents	5	10.9
Work ran out/Find work/Job related	5	10.5
Climate/altitude	4	7.7
Cost of living/Income considerations	3	6.1
Total	47	100.0

Only a very small percentage (1.2%) of Arkansas respondents have lived in the state less than five years. More than a fourth of the respondents who moved to Arkansas in the last five years were returning home to be with family and friends. Just under a fifth retired to Arkansas, and 17% came to care for a parent. Previous state of residence varied widely, with the most frequently cited being California and Illinois.

Summary

The state mean for years of residence in Arkansas is 55 years for the respondents in the study. Only 1.2% of the respondents have lived in Arkansas for less than five years. The largest proportion of recent residents (29.4%) are actually returning residents who came home to be with family or friends. Approximately 18% retired to Arkansas, and another 17% came to care for a parent. Compared to other regions, average length of tenure in the state is shortest for elders in Region I.

4.3.2 Support System

Respondents were asked about their personal support system: whether they had someone they could depend on if they became sick or disabled, and whether they had family members not in their household who lived within one hour's traveling time of their home. Those who had other family members nearby were asked how often they saw them. See Table 4-70 for a breakdown by state and region of respondent support system.

TABLE 4-70
SUPPORT SYSTEM BY STATE AND AAA REGION
(ALL RESPONDENTS)

SUPPORT SYSTEM CHARACTERISTIC	Percentage of Respondents in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
SOMEONE TO DEPEND ON	87.7	88.8	86.2	87.5	87.4	86.7	87.1	86.8	87.3
FAMILY WITHIN ONE HR'S TIME**	66.4	74.4	77.5	76.0	84.0	75.1	78.1	82.2	76.8
FREQUENCY OF SEEING NEARBY FAMILY*									
Daily	37.9	46.3	50.7	53.2	37.8	45.3	48.8	47.3	46.0
Weekly	48.9	42.6	36.6	34.7	46.3	39.4	35.7	39.4	40.3
Monthly	10.8	8.5	10.2	9.6	12.6	12.8	12.2	9.7	10.8
<Monthly	2.4	2.6	2.5	2.6	3.3	2.4	3.3	3.5	2.9
Regional Rank (1=Hi,8=Lo)	7	3	2	1	8	6	5	4	
Number	485	505	536	540	525	444	497	461	3992

*Chi square significant at the .01 level.
**Chi square significant at the .0001 level.

Over 12% of the respondents studied indicate that they have no one they can depend on if they become sick or disabled. This finding does not vary significantly by region. Three-fourths of the respondents have family members outside their household who live within one hour's traveling time from their home. This finding does vary significantly by region, with Region I having the lowest percentage of respondents with nearby relatives and Region V having the highest percentage. Region I's low score may be explained by its higher percentage of recent retirement community residents.

Respondents with nearby relatives are most likely to see them either daily (46.0%) or weekly (40.3%). Ten percent see their nearby relatives only monthly, and just under 3% see them even less often. Frequency of seeing nearby family differs significantly by region, with Region IV respondents having the most frequent contact, and Region V respondents having the least frequent contact.

Tables 4-71 to 4-73 provide breakdowns of respondent support system by sex, race, and income.

TABLE 4-71
SUPPORT SYSTEM BY SEX
(ALL RESPONDENTS)

	% OF RESPONDENTS IN SEX TYPE		
SUPPORT SYSTEM CHARACTERISTIC	MALE	FEMALE	ALL
SOMEONE TO DEPEND ON	88.5	86.8	87.3
FAMILY WITHIN ONE HR'S TIME	75.7	77.2	76.8
FREQUENCY OF SEEING NEARBY FAMILY*			
Daily	42.6	47.3	46.0
Weekly	41.7	39.8	40.3
Monthly	11.8	10.4	10.8
<Monthly	3.9	2.4	2.8
Rank (1=Hi,2=Lo)	2	1	
Number	1109	2905	4014

*Chi square significant at the .05 level.

TABLE 4-72
SUPPORT SYSTEM BY RACIAL/ETHNIC GROUP
(ALL RESPONDENTS)

Support System Characteristic	% of Respondents in Racial/Ethnic Group White	Black	Other	All
SOMEONE TO DEPEND ON*	87.8	84.0	87.0	87.3
FAMILY WITHIN ONE HR'S TIME	77.2	74.5	69.4	76.8
FREQUENCY OF SEEING NEARBY FAMILY**				
Daily	44.3	56.3	60.8	46.1
Weekly	42.5	27.3	31.0	40.3
Monthly	10.5	13.0	4.9	10.8
<Monthly	2.7	3.4	3.3	2.8
Rank (1=Hi,3=Low)	3	2	1	
Number	3403	579	38	4019

*Chi square significant at the .05 level.
**Chi square significant at the .0001 level.

TABLE 4-73
SUPPORT SYSTEM BY HOUSEHOLD INCOME
(ALL RESPONDENTS)

Support System Characteristic	Percentage of Respondents in Income Group							
	$0-3999	$4000-6999	$7000-9999	$10000-14999	$15000-19999	$20000 29999	$30000 +	All
SOMEONE TO DEPEND ON**	84.2	84.4	83.0	87.6	91.4	92.7	94.3	87.2
FAMILY WITHIN ONE HR'S TIME*	74.5	79.2	82.4	75.7	75.7	69.6	78.3	77.4
FREQUENCY OF SEEING NEARBY FAMILY								
Daily	48.3	49.1	47.5	45.7	43.3	44.2	36.5	45.8
Weekly	36.2	37.0	36.1	42.6	45.9	41.3	45.5	39.9
Monthly	12.6	10.7	11.7	9.7	9.7	12.1	14.8	11.3
<Monthly	3.0	3.2	4.7	2.0	1.1	2.3	3.2	2.9
Rank (1=Hi,7=Lo)	4	2	6	1	3	5	7	
Number	267	781	505	523	305	284	315	2980

*Chi square significant at the .01 level.
**Chi square significant at the .0001 level.

Percentage of respondents having someone to depend on if they become sick or disabled differs significantly by race and income, but not by sex. Black elders are less likely to have someone to depend on than white elders, and elders with household incomes under $15,000 are less likely to have someone to depend on than are elders with household incomes of $15,000 or more.

Percentage of respondents with family who live within one hour's traveling time differs significantly by income, but not by sex or race. Respondents with household incomes between $7000 and $9999 are most likely to have nearby family, and respondents with household incomes between $20,000 and $29,999 are least likely to have nearby family. All other income groups have similar profiles.

Frequency of seeing nearby relatives differs significantly by sex and race, but not by income. Female respondents see their nearby relatives more often than male respondents, and black respondents see them more frequently than white respondents.

Summary

> **Over 12% of the respondents in the study have no one they can depend on if they become sick or disabled. A smaller proportion of black elders have someone to depend on than do white elders, and elders with household incomes under $15,000 are less likely to have someone to depend on than elders with household incomes over $15,000. Three-fourths of the respondents have family within one hour's traveling time, and most see them daily or weekly. Compared to other regions, respondents in Region V are most likely to have nearby relatives, and respondents in Region I are least likely to have nearby relatives.**

4.3.3 Visits to Doctors

Respondents were asked how often, on the average, they visit a doctor. See Table 4-74 for a breakdown by state and region of frequency of visits to doctors.

TABLE 4-74
FREQUENCY OF VISITS TO DOCTORS BY STATE AND AAA REGION
(ALL RESPONDENTS)

VISITS TO DOCTORS	Percentage of Respondents in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
FREQUENCY*									
<Yearly	21.8	22.8	17.0	16.0	19.6	22.4	17.7	20.0	19.6
Yearly	28.8	24.5	24.8	22.2	25.4	27.9	25.3	31.4	26.1
>Yearly/ <Monthly	35.0	33.7	37.7	46.6	39.4	35.9	38.8	37.8	38.2
Monthly	10.4	14.1	12.7	10.4	10.3	9.1	12.9	6.4	10.9
>Monthly/ <Weekly	3.2	3.9	6.5	4.1	4.2	4.1	4.0	3.6	4.2
Weekly	.5	.9	1.0	.7	1.1	.4	1.1	.6	.8
>Weekly	.4	.2	.2	-	-	.2	.3	.2	.2
RANK (1=Hi,8=Lo)	6	5	1	2	4	7	3	8	
Number	484	502	533	533	524	448	500	464	3988

*Chi square significant at the .01 level.

The modal frequency for visiting a doctor is more than yearly but less than monthly. Frequency of doctor visits differs significantly by region, with respondents in Region III making the most frequent visits and respondents in Region VIII the least frequent. This finding fits the relative prevalence of health and disability problems in the two regions.

Table 4-75 provides a breakdown by age of frequency of visits to doctors.

TABLE 4-75
FREQUENCY OF VISITS TO DOCTORS BY AGE
(ALL RESPONDENTS)

VISITS TO DOCTORS	PERCENTAGE OF RESPONDENTS IN AGE COHORT 55-59	60-64	65-69	70-74	75-79	80-84	85+	AR
FREQUENCY*								
<Yearly	21.8	23.7	20.9	16.0	15.2	17.4	13.9	19.6
Yearly	34.2	28.4	24.6	23.8	22.4	16.6	18.0	26.0
>Yearly/ <Monthly	33.0	36.8	39.7	39.6	41.1	43.0	43.7	38.3
Monthly	7.2	8.1	9.9	12.8	13.7	16.8	18.2	10.8
>Monthly/ <Weekly	2.8	2.6	3.7	7.0	6.2	4.0	5.6	4.3
Weekly	.7	.3	.7	.8	1.2	2.2	.6	.8
>Weekly	.2	.1	.5	-	.2	-	-	.2
RANK (Hi=1,Lo=7)	7	6	5	4	3	2	1	
Number	773	912	646	669	512	324	164	3999

*Chi square significant at the .0001 level.

Frequency of visits to physicians differs significantly by age. The older the respondent, the more often she/he is likely to visit the doctor.

Tables 4-76 and 4-77 provide breakdowns of the mean frequency of visits to doctors by presence or absence of ADL limitation and chronic disability, respectively.

TABLE 4-76
FREQUENCY OF VISITS TO DOCTORS BY ADL LIMITATION
(ALL RESPONDENTS)

Activity of Daily Living	Frequency of MD Visits	
	Group Mean	Number
Light Housework*		
No limitation	2.44	3311
Has limitation	3.23	682
Cooking*		
No limitation	2.52	3715
Has limitation	3.35	277
Feeding Self		
No limitation	2.57	3976
Has limitation	2.78	17
Dressing/Grooming*		
No limitation	2.55	3877
Has limitation	3.43	115
Bathing/Shampooing*		
No limitation	2.53	3784
Has limitation	3.34	209
Heavy Cleaning/Yardwork*		
No limitation	2.34	2529
Has limitation	2.98	1463
Business Affairs*		
No limitation	2.54	3731
Has limitation	3.10	261
Shopping*		
No limitation	2.50	3604
Has limitation	3.31	388
Taking Medication*		
No limitation	2.56	3893
Has limitation	3.31	100
Using Toilet*		
No limitation	2.56	3920
Has limitation	3.40	73
Bowel/Bladder Accidents*		
No limitation	2.54	3766
Has limitation	3.10	227

TABLE 4-76 CONTINUED
FREQUENCY OF VISITS TO DOCTORS BY ADL LIMITATION
(ALL RESPONDENTS)

Activity of Daily Living	Frequency of MD Visits	
	Group Mean	Number
Using Telephone*		
No limitation	2.56	3934
Has limitation	3.22	59
Doing Laundry*		
No limitation	2.52	3739
Has limitation	3.39	253
Walking*		
No limitation	2.48	3485
Has limitation	3.24	507
Getting Places*		
No limitation	2.52	3714
Has limitation	3.28	278
Writing*		
No limitation	2.51	3671
Has limitation	3.32	322
Reading*		
No limitation	2.51	3671
Has limitation	3.26	336

Key: 1=Less than yearly 2=Yearly
3=More than yearly, less than monthly 4=Monthly
5=More than monthly, less than weekly 6=Weekly
7=More than weekly

*Chi square significant at the .0001 level.

TABLE 4-77
FREQUENCY OF VISITS TO DOCTORS BY CHRONIC HEALTH DISABILITY (ALL RESPONDENTS)

Chronic Health Disability	Frequency of MD Visits	
	Group Mean	Number
Breathing**		
No limitation	2.47	3337
Has limitation	3.08	655
Hearing**		
No limitation	2.52	3130
Has limitation	2.77	862
Remembering**		
No limitation	2.51	3358
Has limitation	2.94	634
Talking*		
No limitation	2.57	3945
Has limitation	3.16	48
Understanding**		
No limitation	2.54	3773
Has limitation	3.11	220
Stress/Depression/Anxiety**		
No limitation	2.51	3366
Has limitation	2.94	626
Other Emotional Problems**		
No limitation	2.56	3950
Has limitation	3.44	43
Dental Problems**		
No limitation	2.53	3344
Has limitation	2.81	649
Alzheimer's Disease		
No limitation	2.57	3975
Has limitation	2.71	17
Eye Diseases**		
No limitation	2.50	3202
Has limitation	2.87	791
Parkinson's Disease**		
No limitation	2.57	3971
Has limitation	3.56	22

TABLE 4-77 CONTINUED
FREQUENCY OF VISITS TO DOCTORS BY CHRONIC HEALTH DISABILITY
(ALL RESPONDENTS)

Chronic Health Disability	Frequency of MD Visits: Group Mean	Frequency of MD Visits: Number
Kidney Problems**		
No limitation	2.51	3610
Has limitation	3.15	383
Heart Condition**		
No limitation	2.41	3101
Has limitation	3.13	892
Hardening of the Arteries**		
No limitation	2.53	3634
Has limitation	3.06	359
High Blood Pressure**		
No limitation	2.36	2415
Has limitation	2.91	1577
Cancer**		
No limitation	2.55	3748
Has limitation	2.99	245
Stroke**		
No limitation	2.54	3820
Has limitation	3.33	172
Arthritis**		
No limitation	2.34	1943
Has limitation	2.80	2050
Diabetes**		
No limitation	2.50	3593
Has limitation	3.21	400
Frequent Falls/Accidents**		
No limitation	2.51	3546
Has limitation	3.07	447

Key: 1=Less than yearly 2=Yearly
3=More than yearly, less than monthly 4=Monthly
5=More than monthly, less than weekly 6=Weekly
7=More than weekly

*Chi square significant at the .001 level.
**Chi square significant at the .0001 level.

Frequency of visits to physicians differs significantly by presence or absence of ADL limitations. In all instances, respondents with a particular limitation visit doctors more often than respondents without the same limitation. Compared to those with other ADL limitations, respondents who experience difficulty in the use of a toilet report the highest frequency of visits to doctors, and respondents who experience difficulty with feeding themselves report the lowest frequency.

Frequency of visits to physicians differs significantly by presence or absence of all chronic health problems except Alzheimer's Disease. As expected, respondents with a particular health problem visit doctors more often than respondents without the same health problem. Compared to those with other chronic health problems, respondents with Parkinson's Disease report the highest frequency of visits to doctors, and respondents with Alzheimer's Disease report the lowest frequency of visits.

Summary

Approximately 16% of respondents visit a doctor more than once a month. Compared to other regions, respondents in Region III visit doctors most often and respondents in Region VIII least often. Older respondents visit doctors more often than younger respondents, and respondents with ADL limitations or chronic health problems visit doctors more often than respondents free of the same limitations and problems.

4.3.4 Life Style Changes to Improve Health

Respondents were asked whether they had made any changes in their life style because of information they had read or heard about healthier living. If they had, they were asked what kind of change. See Table 4-78 for a breakdown by state and region of lifestyle changes.

TABLE 4-78
CHANGES IN LIFE STYLE IN RESPONSE TO INFORMATION
ABOUT HEALTHIER LIVING BY STATE AND AAA REGION
(ALL RESPONDENTS)

LIFESTYLE CHANGES	Percentage of Respondents in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
HAD MADE CHANGES	36.8	32.8	36.7	28.9	34.0	36.5	35.6	33.8	34.3
Number	486	505	537	540	526	445	497	461	3997
CHANGE									
Diet	43.5	38.0	37.6	35.8	36.1	43.8	31.4	35.7	37.8
More exercise	18.8	12.0	12.5	10.3	18.0	16.7	25.0	11.8	15.4
Stop smoking	11.1	8.7	7.6	9.6	6.4	6.4	7.6	9.0	8.2
Medication mgmt.	1.0	2.9	.8	1.7	-	4.4	2.1	2.0	1.8
Safety habits	1.0	1.2	1.5	.8	1.9	2.8	2.4	1.2	1.6
Stress mgmt.	-	-	.8	-	1.9	1.6	1.0	.8	.8
Other	8.7	9.1	8.0	4.8	2.6	3.2	8.7	4.3	5.9
Number	89	104	113	94	128	108	77	110	823

Just over one-third of the respondents indicate that they have made some changes in their life because of things they have read or heard about healthier living. The most frequently cited change is in diet, followed by more exercise, and cessation of smoking. Life style changes related to health do not differ significantly by region.

Table 4-79 provides a breakdown of lifestyle changes by education.

TABLE 4-79
CHANGES IN LIFE STYLE IN RESPONSE TO INFORMATION
ABOUT HEALTHIER LIVING BY EDUCATION LEVEL
(ALL RESPONDENTS)

	PERCENTAGE OF RESPONDENTS COMPLETING EDUCATION LEVEL						
LIFESTYLE CHANGES	<HS	HS/ GED	JR COL/ TECH SCH	SOME COL	4-YR COL	GRAD/ PROF SCH	ALL
HAD MADE CHANGES**	27.7	36.8	46.0	46.9	48.5	44.9	34.8
Number	1884	1154	219	302	252	155	3966
CHANGE							
Diet**	28.9	42.1	44.9	47.5	48.7	38.0	37.9
More exercise*	12.0	14.6	21.1	16.9	20.4	39.8	15.4
Stop smoking	7.9	6.9	15.9	7.9	8.3	8.3	8.2
Medication mgmt.	1.8	1.8	4.3	-	-	4.3	1.8
Safety habits	3.1	.3	1.5	-	-	-	1.6
Stress mgmt.	1.4	.7	-	-	-	-	.8
Other	6.5	4.7	4.4	11.4	7.6	-	6.0
Number	370	245	58	60	55	30	818

*Chi square significant at the .01 level.
**Chi square significant at the .0001 level.

Likelihood of having made changes in one's lifestyle in response to information about healthier living differs significantly by education. Respondents with at least some college education are more likely to have made changes in response to health information than are respondents with only a high school education or less. Four-year college graduates were more likely to have changed their diet than were other elders. Graduate and professional school graduates were more likely to have increased their exercise than were other elders.

Summary

Just over one-third of the respondents indicate that they have made life style changes as a result of things they have read or heard about healthier living. The changes cited most frequently are improved diet, more exercise, and cessation of smoking. Respondents with at least some college education are more likely to have made changes than respondents with only a high school diploma or less education.

4.3.5 Feared Illnesses/Problems

Respondents were asked whether there are any illnesses or problems they are particularly afraid they may develop in the future. Just under one-fifth of the respondents indicate that there are illnesses or other problems they are especially afraid of developing. See Table 4-80 for a breakdown of the major illnesses/-problems feared by respondents.

TABLE 4-80
FEARED ILLNESSES/PROBLEMS
(ALL RESPONDENTS)

FEARED ILLNESS/PROBLEM	NUMBER OF RESPONDENTS	PERCENTAGE OF RESPONDENTS
CANCER	371	48.2
HEART DISEASE	140	18.2
STROKE	77	10.0
DIABETES	67	8.7
ARTHRITIS	47	6.1
ALZHEIMER'S DISEASE	27	3.5
EMPHYSEMA	25	3.3
BLINDNESS	21	2.7
HYPERTENSION	16	2.1
DEPENDENCY ON OTHERS	12	1.6
HARDENING OF THE ARTERIES	9	1.2
BACK PAIN	9	1.2
CIRCULATORY PROBLEMS	8	1.0
LIFE THREATENING CONDITION	7	.9
MOBILITY PROBLEMS	7	.9
AIDS	5	.7
NERVOUS DISORDER/DEPRESSION	5	.7
BROKEN BONES	4	.5
OTHER (MISC.)	68	8.8
TOTAL	769	100.0

A total of 769 respondents report at least one problem they fear, and 3.9% name more than one problem. All responses are grouped together. Because more than one response is possible per person, percentages do not total 100. The three most frequently named problems are cancer, heart disease, and strokes. Alzheimer's Disease is mentioned by more than 6% of the respondents. The public attention to, and fear of, AIDS is also reflected in these totals. While less than 1% of the respondents in this study mention AIDS, field work in other states completed prior to 1986 did not identify **any** elders who mentioned this fear.

Summary

The three fears mentioned most frequently by elders are cancer, heart disease, and stroke.

4.3.6 Life Satisfaction

Respondents were asked how often they feel lonely, how satisfied they are right now with their life as a whole, and whether, given their current health and social and economic needs, they consider themselves better off, worse off, or about the same as they were five years ago. See Table 4-81 for a breakdown of life satisfaction by state and region.

TABLE 4-81
LIFE SATISFACTION BY STATE AND AAA REGION
(ALL RESPONDENTS)

LIFE SATISFACTION MEASURE	Percentage of Respondents in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
FREQUENCY OF LONELINESS									
Almost never	65.4	62.5	63.9	66.1	63.0	67.1	63.4	67.6	64.8
Sometimes	27.0	27.9	27.9	26.5	29.1	25.8	27.6	26.0	27.3
Quite often	7.6	9.5	8.2	7.4	7.8	7.1	9.0	6.4	7.9
CURRENT SATISFACTION									
Very Sat.	31.9	31.3	30.8	29.6	32.5	30.4	24.5	36.3	30.9
Sat.	50.7	51.2	51.1	53.6	48.7	53.9	58.3	47.1	51.8
Sat/Dissat.	16.1	15.3	15.1	14.8	14.8	13.0	13.5	13.5	14.5
Dissat.	.7	1.5	2.2	1.3	2.6	1.4	3.1	2.2	1.9
Very Dissat.	.7	.6	.8	.7	1.4	1.3	.6	.9	.9
COMPARISON WITH FIVE YEARS AGO									
Better Off	24.1	21.2	20.2	23.9	26.3	23.4	22.8	24.3	23.3
About Same	51.2	47.8	44.5	46.3	48.2	47.2	47.7	50.3	47.8
Worse Off	24.7	31.0	35.3	29.8	25.5	29.4	29.6	25.4	28.9
Number	462	487	518	516	507	429	482	454	3854

Just under two-thirds of the respondents report that they are almost never lonely, and about 8% say they are quite often lonely. Over half are satisfied with their life as a whole, and another 31% are very satisfied. Less than 3% report they are either dissatisfied or very dissatisfied. Almost half feel that they are about as well off, in terms of health and social and economic needs, as they were five years ago. Almost a fourth consider themselves better off, but more than a fourth consider themselves worse off. This finding does not vary enough by region to be statistically significant at the .05 level.

Table 4-82 provides a breakdown of life satisfaction by age.

TABLE 4-82
LIFE SATISFACTION BY AGE
(ALL RESPONDENTS)

LIFE SATISFACTION MEASURE	PERCENTAGE OF RESPONDENTS IN AGE COHORT							
	55-59	60-64	65-69	70-74	75-79	80-84	85+	AR
FREQUENCY OF LONELINESS*								
Almost never	70.1	70.7	69.4	61.6	56.0	51.8	55.7	64.8
Sometimes	23.5	21.1	23.7	31.2	33.9	39.4	32.8	27.3
Quite often	6.4	8.2	7.0	7.2	10.1	8.8	11.5	7.9
CURRENT SATISFACTION								
Very Sat.	33.8	34.3	32.1	27.2	29.1	26.5	26.5	31.0
Sat.	46.7	49.5	52.1	55.6	52.7	57.6	56.8	51.8
Sat/Dissat.	16.1	13.7	13.7	14.2	15.5	13.6	14.3	14.5
Dissat.	2.1	1.6	1.3	2.4	1.9	1.6	2.3	1.9
Very Dissat.	1.3	.9	.8	.6	.8	.7	-	.9
COMPARISON WITH FIVE YEARS AGO*								
Better Off	28.6	28.2	22.6	19.9	18.6	15.2	17.8	23.3
About Same	42.3	44.3	50.5	52.6	50.3	52.7	45.7	47.8
Worse Off	29.2	27.4	26.8	27.5	31.0	32.1	36.5	28.9
Number	740	894	631	654	498	310	150	3877

*Chi square significant at the .0001 level.

Loneliness and comparison of one's current situation with five years ago differ significantly by age, but overall life satisfaction does not. Older respondents experience loneliness more often than younger respondents and are more likely to see their situation as worse than five years ago.

Summary

Although less than 3% of respondents report that they are dissatisfied with their lives, 8% are quite often lonely, another 27% are sometimes lonely, and 29% consider themselves worse off than they were five years ago. Older respondents experience more frequent loneliness than younger respondents and are more likely to see their situation as worse than five years ago.

5.0 A COMPARISON OF ARKANSAS FINDINGS AND OTHER RELEVANT STUDIES

In addition to the development of a comprehensive data set for planning, Arkansas' participation in this project enables comparisons of state findings to trends identified in other states. To date, Arkansas is one of seven states or locales participating in the National Panel Study on Health and Aging. The base-line questionnaire described in Chapter 4.0 is in use in an almost identical format in each of the sites. Each site or state receives a comprehensive needs assessment from the base-line activity. Since each state is on a different time line, not all findings are ready for comparison. Data collection is still in progress in one site.

The following figures (1 and 2) describe the sample sites of the National Study. The Arkansas, Maryland, Massachusetts and Texas samples are complete. Data collection is complete in the state of Montana and in Los Angeles County, and analysis is currently underway. Data are being collected in Wayne County (Detroit), Michigan. Each site represents a different type of political and social service climate which impacts the type of services offered as well as the availability and access to needed services.

Several graphic comparisons of the participating states are included in this section. **STATE AREA RESOURCE FILES (ARF) DEVELOPED FOR THE NATIONAL TECHNICAL INFORMATION**

Figure 1
The Sites Included in the
NATIONAL PANEL STUDY ON HEALTH AND AGING

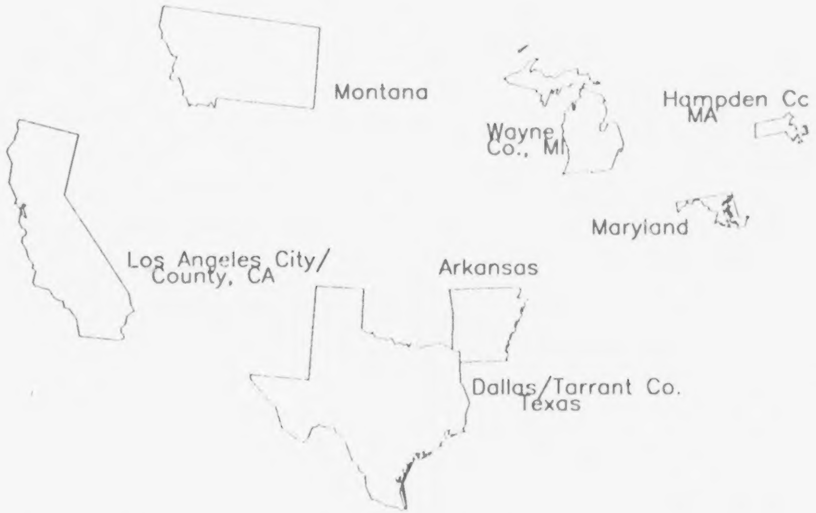

Montana
Wayne Co., MI
Hampden Cc MA
Maryland
Los Angeles City/ County, CA
Arkansas
Dallas/Tarrant Co. Texas

FIGURE 2

SAMPLE SITES AND NETWORK INVOLVEMENT

State	Site	Sample Size	State Unit Involvement	AAA Involvement	Other Comm.
Arkansas	8 AAA Regions	6,097	yes	8	1
California	Los Angeles City/County	4,500	yes	2	1
Maryland	5 HSAs and Baltimore City	6,432	yes	24	6
Massachusetts	Hampden Co.	1,575	no	3	0
Michigan	Wayne Co.	2,200	yes	1	2
Montana	State	2,200	yes	11	0
Texas	Dallas/ Tarrant Co.	2,234	yes	28	2

Note: Other agencies involved in planning and use of information include:

- National Association of Area Agencies on Aging
- National Association of State Units on Aging
- U.S. Senate Special Committee on Aging
- U. S. House Select Committee on Aging
- American Association of Retired Persons
- Assistant Secretary for Planning and Evaluation
- Health Care Finance Administration
- Prospective Payment Assessment Commission

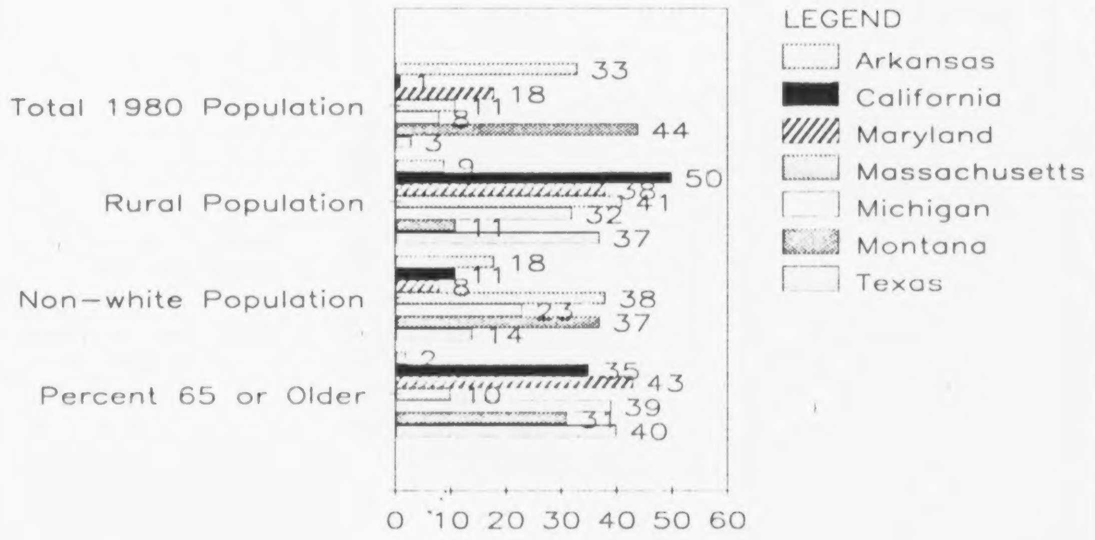
SERVICE, 1984, WERE UTILIZED TO SUMMARIZE THE CHARACTERISTICS AND RANKINGS OF EACH OF THE PARTICIPATING STATES (see technical note at end of chapter). Each of these descriptive measures is likely to affect the service structure for both health and other human service provision.

Among the 50 states, Arkansas ranks 33rd in total population (Figure 3). More than 48% live in rural areas resulting in a 9th rank in rural population with a density ratio of 44 people per square mile. Montana ranks 44th in total population. Los Angeles and Dallas/Tarrant Counties represent the sites in the most densely populated states in this sample. Among the participating states, Arkansas and Montana are the most rural and the least populous (NTIS, 1984).

Arkansas ranks 18th among the 50 states in percent of non-white population. Among participating states, Maryland, California, and Texas each have larger concentrations of minority populations. Arkansas ranks 2nd in the nation in percent of elders 65 or older. Massachusetts is the only other participating state ranking in the top ten. Maryland ranks 43rd in the nation and represents the state with the smallest concentration of elders in this study (NTIS, 1984).

The economic characteristics of a state greatly influence the service structure in terms of availability and access to needed services. From the 1980 Census data, Arkansas ranked 50th in per capita income and 33rd in household income for all age groups. In 1980, individual

Figure 3
Selected Demographic Rankings of
Sites in National Panel Study
(1=high; 51=low)



Source: NTIS Area Resource Files

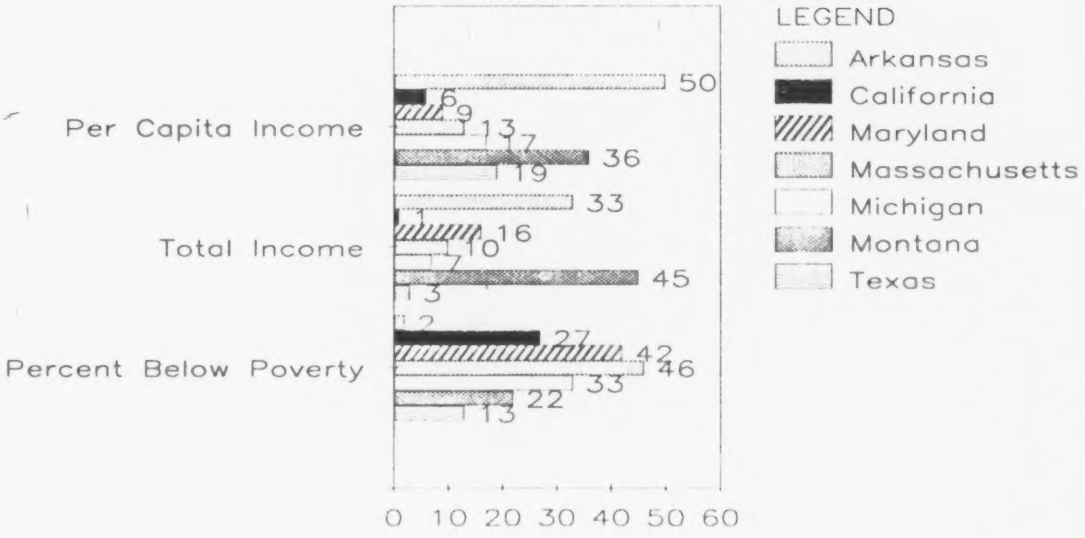
income averaged $7,204, and household income averaged $20,194. Arkansas ranked 2nd in percentage of population below poverty. On each of the major economic variables compared in this study, Arkansas' economic conditions are the least favorable of the participating states (Figure 4).

In 1980, Arkansas ranked 5th in mortality with 9.9 deaths per 1,000 people. In terms of supply of health professionals, Arkansas ranks 47th in number of MDs and DOs, 50th in number of RNs and first in number of LPNs (Figure 5). Again, in comparison to the other participating states, Arkansas has fewer skilled health professionals. Arkansas and Texas rank lowest in numbers of RNs per 100 beds, and California and Massachusetts rank highest of the states in this study (9th and 10th in the nation) (NTIS, 1984).

Arkansas ranks 13th in the nation in number of hospital beds with an average of 5.7 beds per 1,000 individuals. The state ranks 44th, however, in average number of services per hospital and last among the 50 states in ambulatory visits (Figures 6-7).

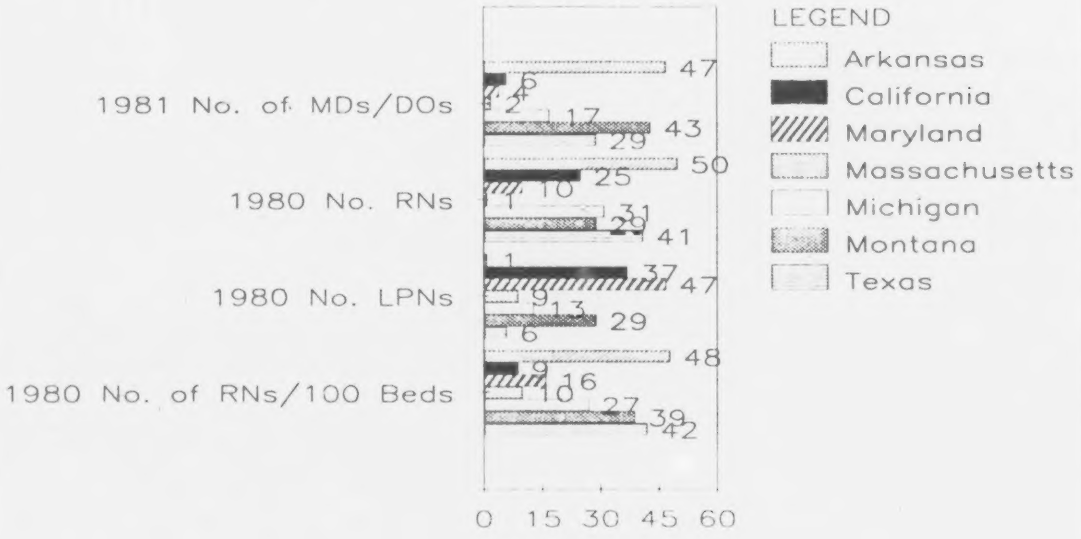
Across the next five years, more than 25,000 elders in each of these states will be tracked and compared. Of special interest are the hospitalization patterns and community-based service usage demonstrated by elders in various states under different cost containment guidelines. Also of major importance will be the ability to track the use of services and the long range impact on health that

Figure 4
Selected Economic Rankings of
Sites in National Panel Study
(1=high; 51=low)



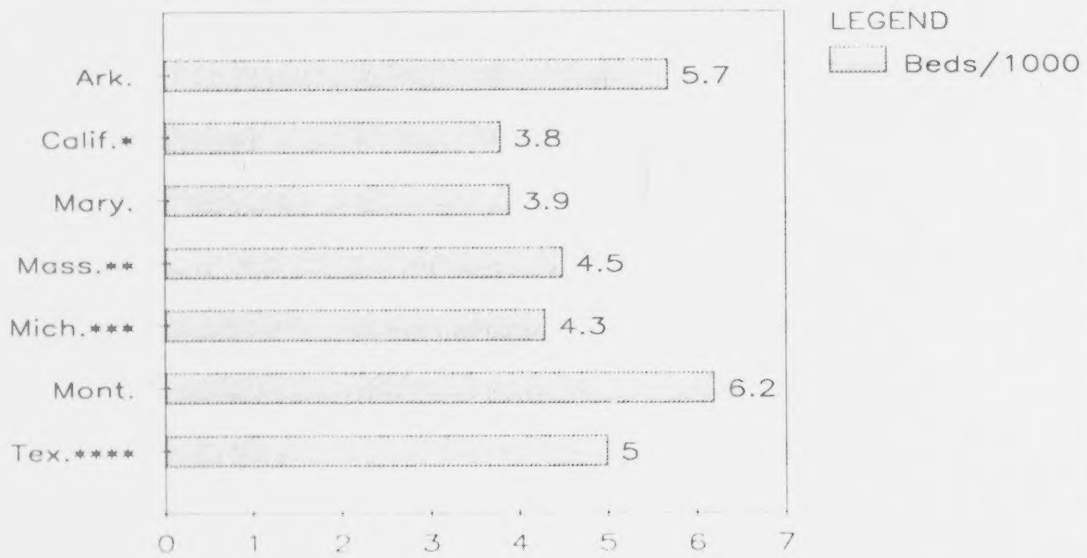
Source=NHS Area Resource File

Figure 5
Selected Rankings of Health Staffing Levels of Sites in National Panel Study
(1=high; 51=low)



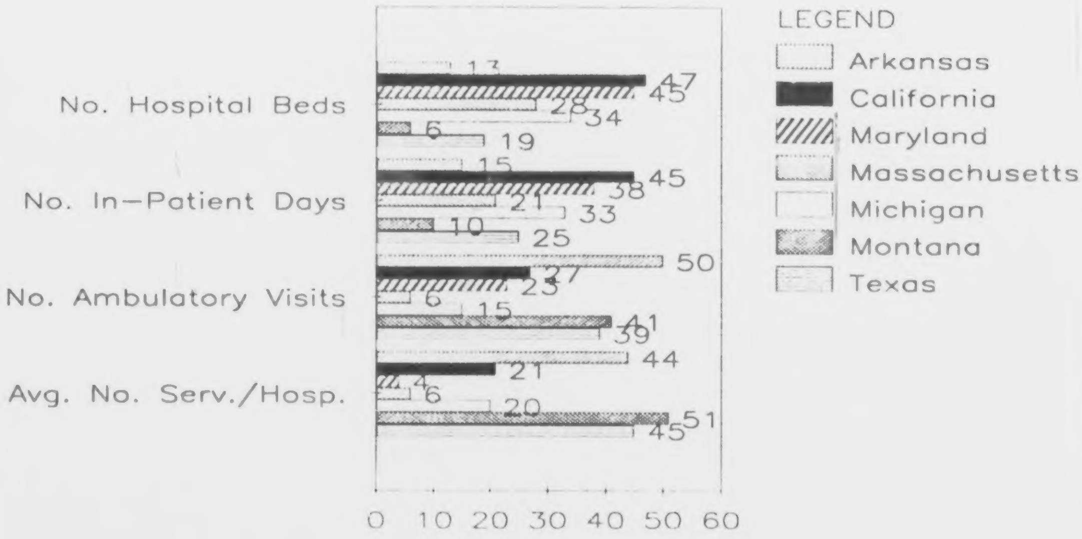
Source=NTIS Area Resource File

Figure 6
Number of Hospital Beds/1000 People
in National Panel Study Sites
(Source=NTIS Area Resource Files)



*L.A. Co. **Hampden Co. ***Wayne Co. ****Dallas/Tarrant Co.

Figure 7
Selected Rankings of Health Resource Levels in National Panel Study Sites
(1=high; 51=low)



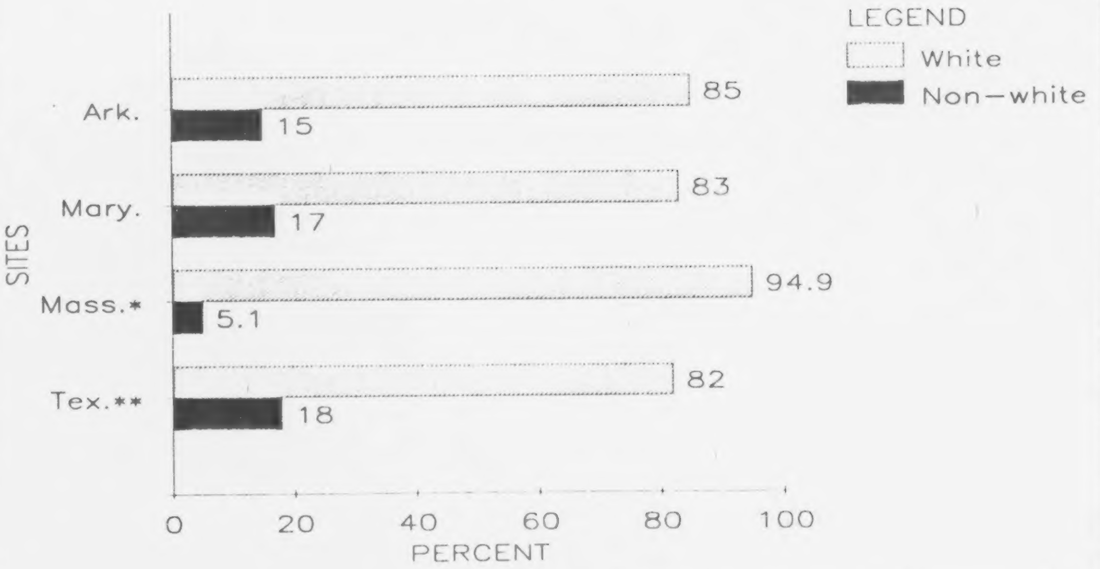
Source=NTIS Area Resource Files

services provide. Although Phase I research in each of the sites is now being completed and all comparison data cannot be released until approved by the individual states, the remainder of this chapter describes four of the samples in the National Panel Study and compares some of the Arkansas findings with those in other states. Many of the major findings from a policy perspective await answers which will be provided in later stages of this study. However, this early comparison may help to raise appropriate policy questions which can be addressed during the conduct of this study.

Figure 8 describes the racial characteristics of the samples in four of the participating sites. Arkansas contains the second largest concentration of nonwhite participants among these four sites. Although Texas as a state reports a larger concentration of minority residents than does Arkansas, the site studied is the Dallas/Tarrant County area. Much of the minority concentrations in Texas can be found in the more rural areas rather than the most intensely urban areas. The racial composition of a sample is important from a policy perspective, since many health-related problems are linked to different racial or ethnic groups. And, in planning services, questions of access for all racial/ethnic communities must be addressed.

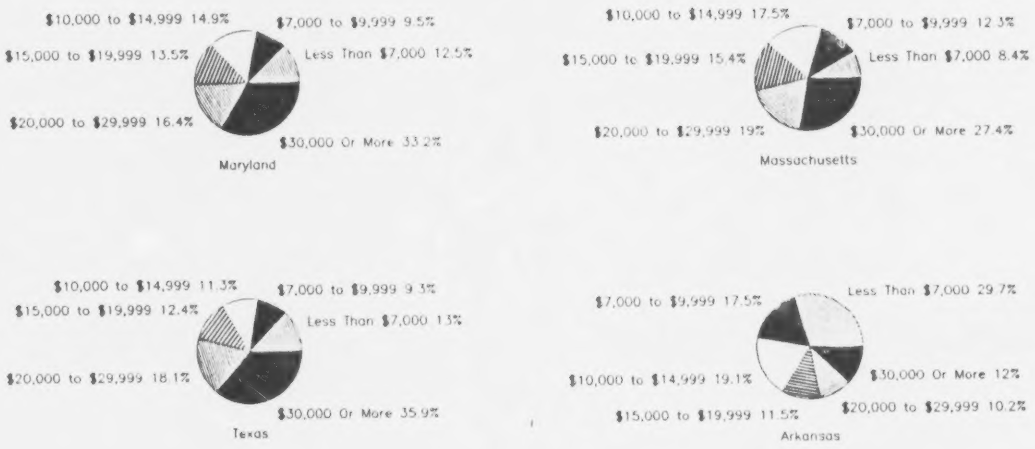
In economic terms, as one would predict based on the rankings described, Arkansas contains the highest percentage of very poor elders (Figure 9). Although Baltimore contains

Figure 8
Race/Ethnic Characteristics of the Samples of Elders in Selected Sites



*Hampden Co. **Dallas/Tarrant Co.

Figure 9
Income Characteristics of the Samples of Elders in Selected States



large pockets of very poor respondents, the state of Maryland as a whole ranks 3rd among the four compared. The economic characteristics of the sample are critical in terms of understanding variances in prevalence rates and service usage patterns. Higher prevalence rates of health problems are often linked with low income, and access to services which are not subsidized in some fashion or only available through private purchase may be limited for the lower income groups.

Reflecting the older average age of the Arkansas sample (Figure 10), more individuals in Arkansas live alone than is true in the three other sites described (Figure 11). Almost a quarter of the Arkansas respondents are alone. Arkansas elders report the lowest rate of households consisting of three or more individuals.

When comparing several of the prevalence rates for problems in activities of daily living and chronic health problems, the older average age, the higher rates of poverty, and the larger concentrations of non-white respondents are reflected. When comparing prevalence rates of difficulty doing light housework, cooking, feeding self, dressing/grooming, or bathing/shampooing, Arkansas rates are consistently higher than those in the other three sites (Figure 12). The same is true when comparing difficulty managing checking or business affairs; shopping, taking medicine at the right time or in the right amount, toileting and bowel or bladder accidents. Prevalence rates for these

Figure 10

Age Distribution of the Samples of Elders in Selected Sites

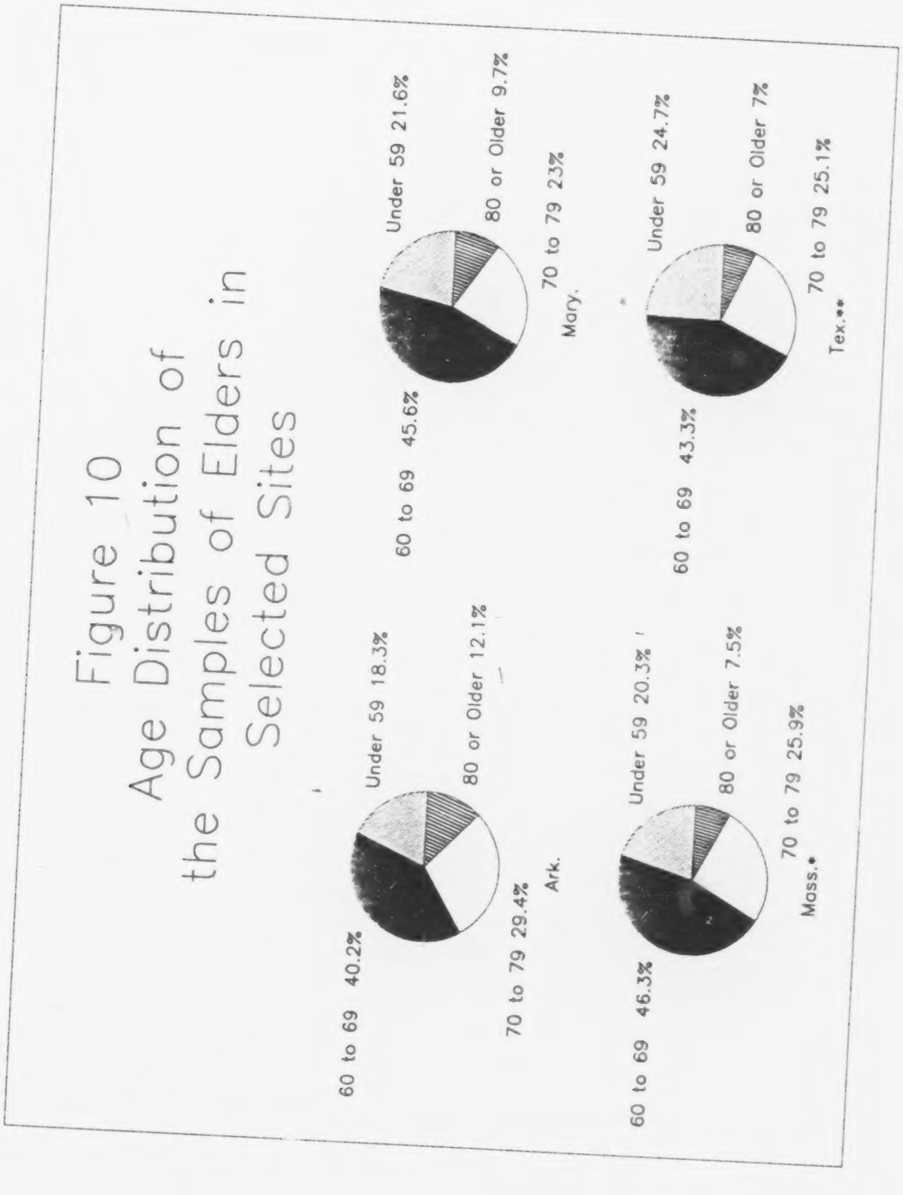


Figure 11

Household Composition of Sample Elders In Selected Sites of the National Panel Study on Health and Aging

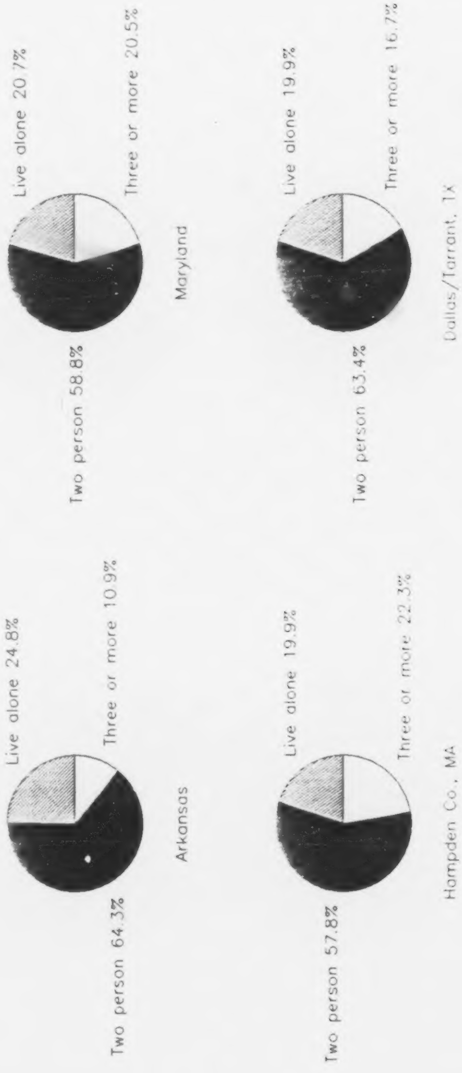
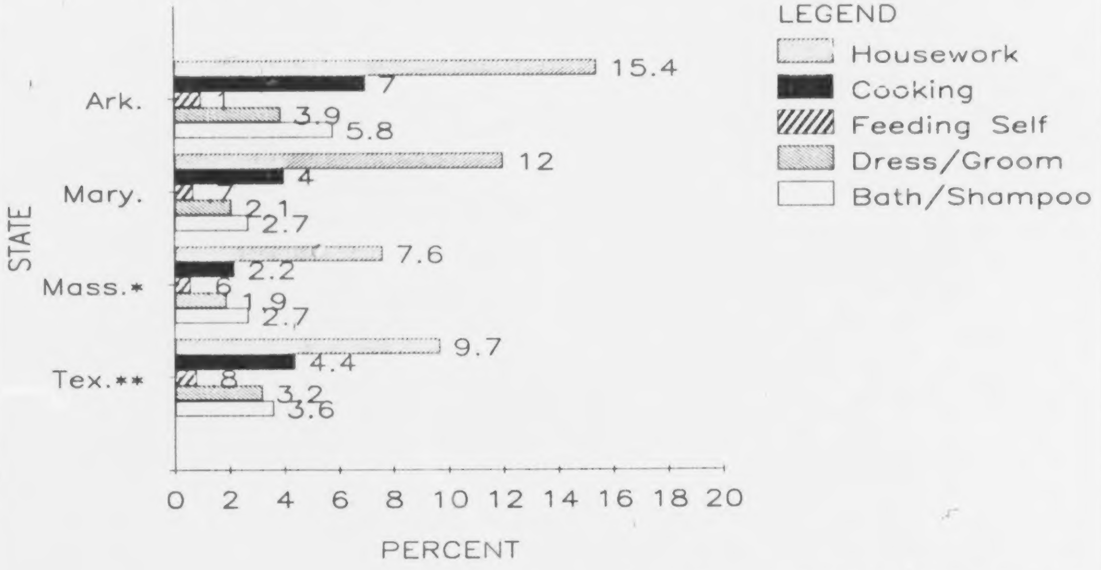


Figure 12
Percent of Elders With Selected ADL Limitations in Arkansas, Maryland, Massachusetts, and Texas



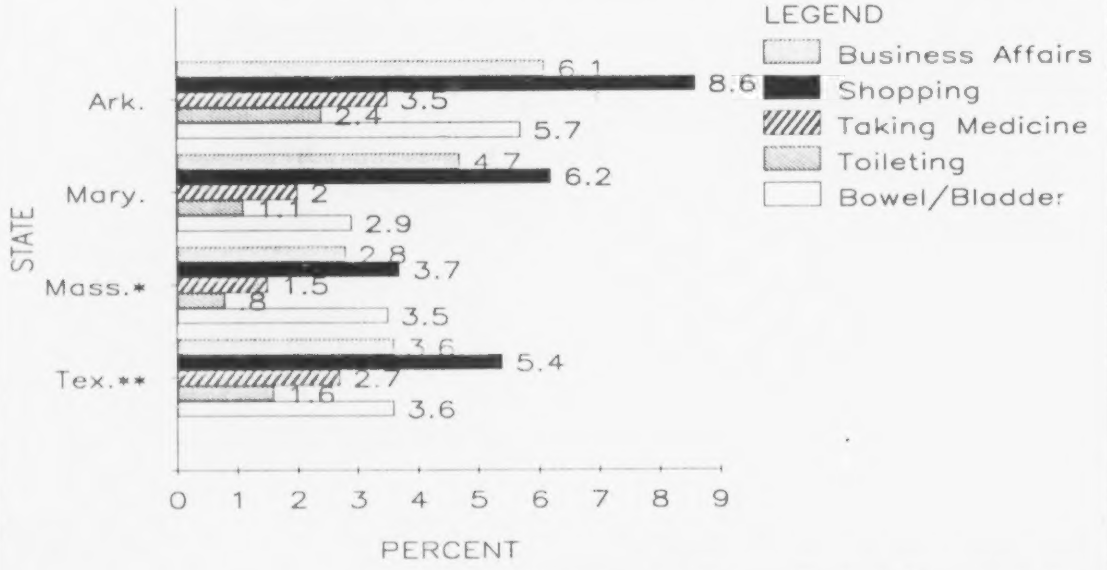
*Hampden Co., **Dallas/Tarrant Co.

difficulties are substantially higher in the Arkansas sample than in the other three (Figure 13). Prevalence rates for difficulty with heavy cleaning is substantially higher in Arkansas than in the other sites (Figure 14). Although Arkansas residents report more physical mobility impairment than other sites, difficulty getting places without special transportation is similar to rates in Maryland and Texas. Lower rates in Hampden Co. may simply reflect more readily available transportation support in this smaller geographical area.

In the prevalence rates of chronic health problems which may lead to need for services, Arkansas rates are substantially higher than others in difficulty breathing and hearing. Most of the sites have fairly similar prevalence rates of eye diseases. The probe concerning problems with teeth, gums or dentures was not asked in the baseline survey in Texas and Massachusetts, but Arkansas rates are higher than those found in Maryland. The question concerning dental problems is included in each of the other sites yet to be reported (Figure 15).

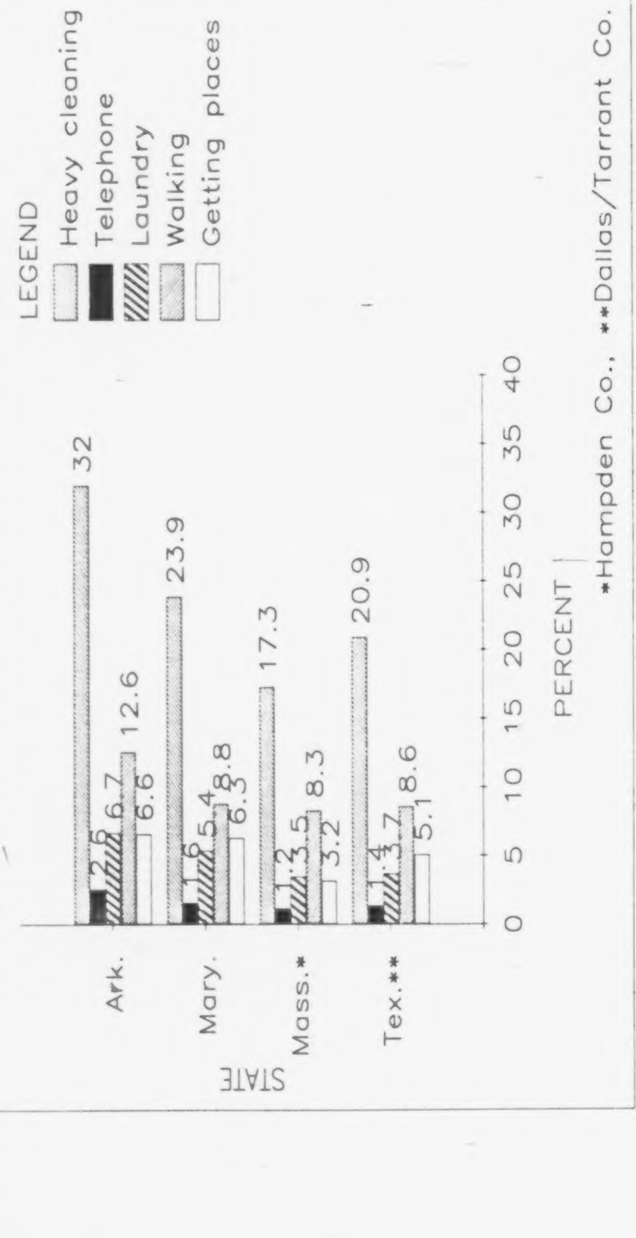
When comparing prevalence rates for the four chronic health conditions which in national studies are found to have the highest prevalence rates, some interesting patterns are noted. Arkansas residents report substantially higher prevalence rates of arthritis (Figure 16). Prevalence rates for heart disease are also higher, but the differences are not as pronounced. Little difference among the samples is

Figure 13
Percent of Elders With Selected
ADL Limitations II in Arkansas,
Maryland, Massachusetts, and Texas



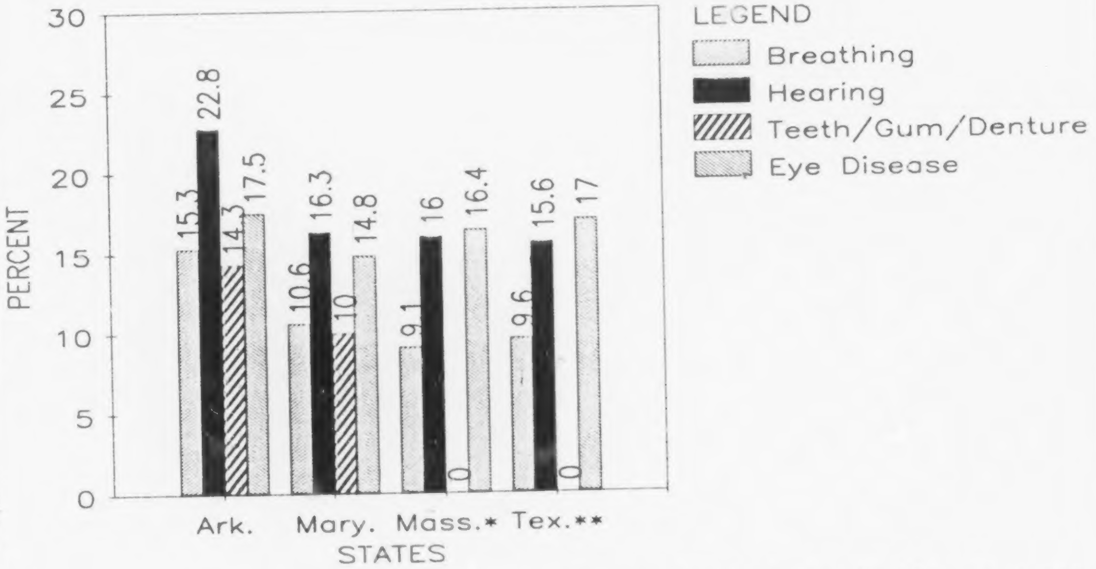
*Hampden Co. **Dallas/Tarrant Co.

Figure 14
Percent of Elders With Selected ADL Limitations III in Arkansas, Maryland, Massachusetts, and Texas



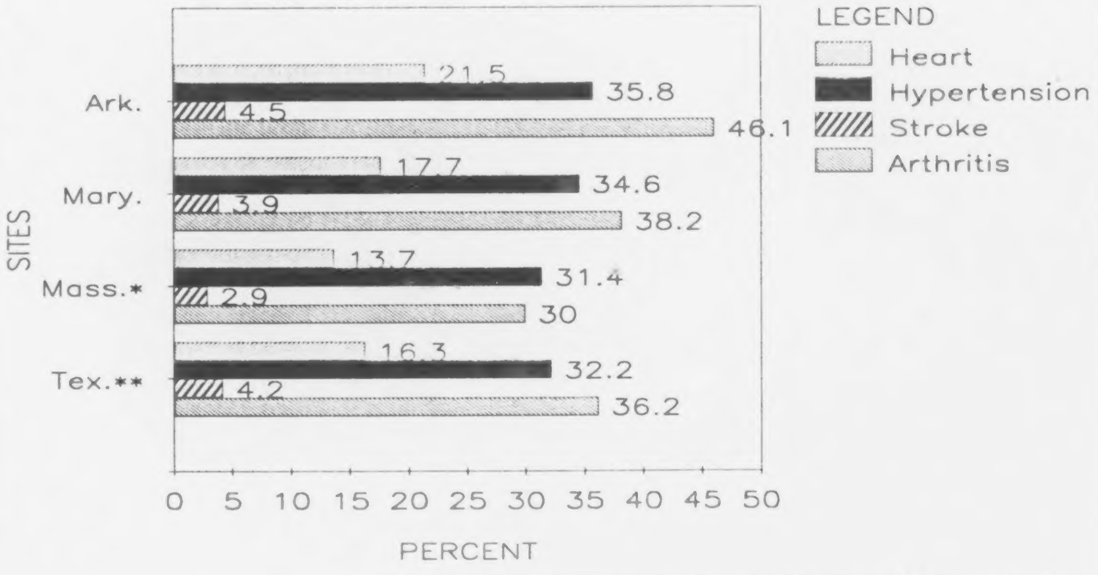
*Hampden Co., **Dallas/Tarrant Co.

Figure 15
Prevalence Rates of Chronic Problems I: Arkansas, Maryland, Massachusetts and Texas



Teeth/Dentures/Gums Not Asked in TX. and MA.

Figure 16
Prevalence Rates of Chronic Problems II: Arkansas, Maryland Massachusetts and Texas

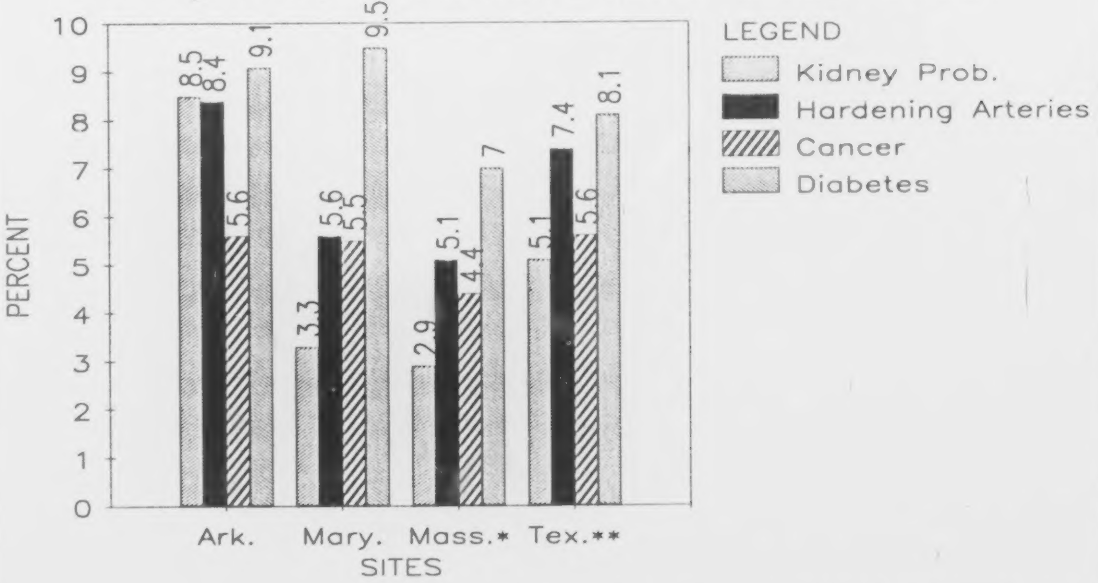


*Hampden Co. **Dallas/Tarrant Co.

found for the prevalence of strokes and hypertension. And prevalence rates for kidney problems and hardening of the arteries are substantially higher in Arkansas than in the other sites. Cancer rates are fairly similar across the four sites, and Maryland reports a higher prevalence rate of diabetes than the other sites (Figure 17).

Given these generally higher rates of problems and limitation in the Arkansas sample, one of the major concerns then is access to and use of services to assist with these problems. Since Arkansas prevalence rates are generally higher than the other sites, one would also expect the use of services to be somewhat higher in this state. The following four figures compare the use of and need for home health and personal care services by age cohort and income category in the four sites. This variable measures only the use of services which require some level of health service or more skilled personal care such as feeding, bathing or assistance with toileting. Other services such as light or heavy cleaning, cooking, etc., are not included in this variable. **Findings are reported only for individuals 65 or older since it is among these age cohorts where eligibility across states is most similar.** In some cases, services may be offered to elders 60 to 64, but national studies which track usage patterns limit their analyses to 65 or older. To compare these data to other national studies, project staff have focused on the 65 or older groups. With the exception of the youngest age cohort, Massachusetts reports

Figure 17
Prevalence Rates of Chronic Problems III: Elders in Arkansas, Maryland, Massachusetts and Texas



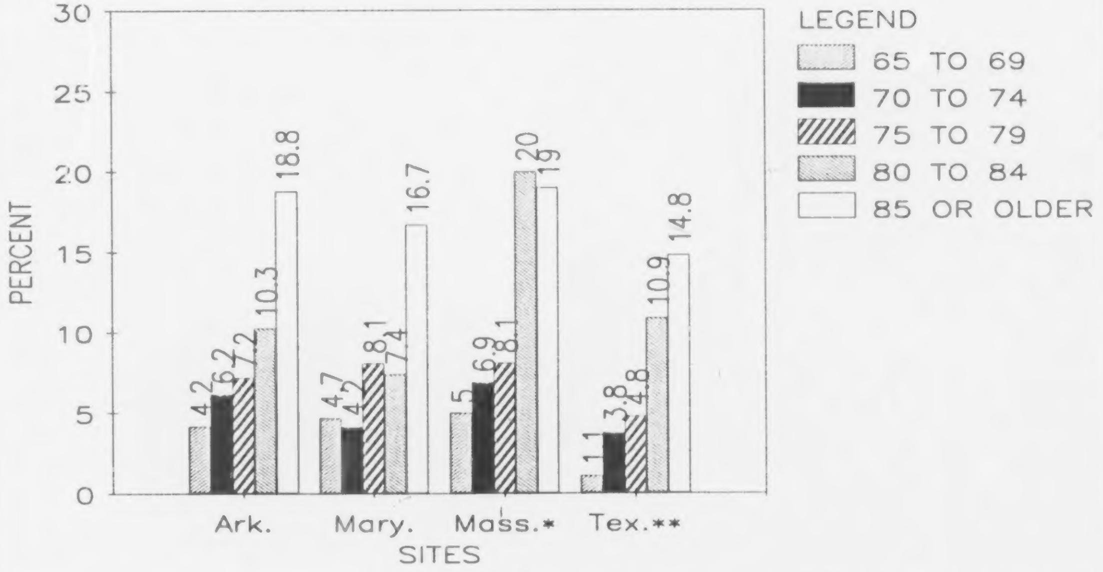
*Hampden Co. **Dallas/Tarrant Co.

the highest utilization of home health and personal care services among the four sites (Figure 18). Although the prevalence rates of problems are highest in Arkansas and generally lowest in the Massachusetts sample, the actual interaction with the service sector is highest in Massachusetts. Arkansas does appear to be targeting services to the 85 or older, however, with utilization rates for this group similar in Arkansas and Massachusetts. Texas, which invests in service delivery at one of the lowest rates in the nation, reflects generally the lowest utilization patterns.

Utilization patterns cannot be fully understood unless considered along with unmet need for services. Since prevalence rates in Massachusetts are lower than the other sites, but utilization rates area highest, it would appear that Massachusetts should have lower rates of unmet need. And conversely, since Arkansas reports generally the highest prevalence levels coupled with lower utilization rates, one would predict greater levels of unmet need.

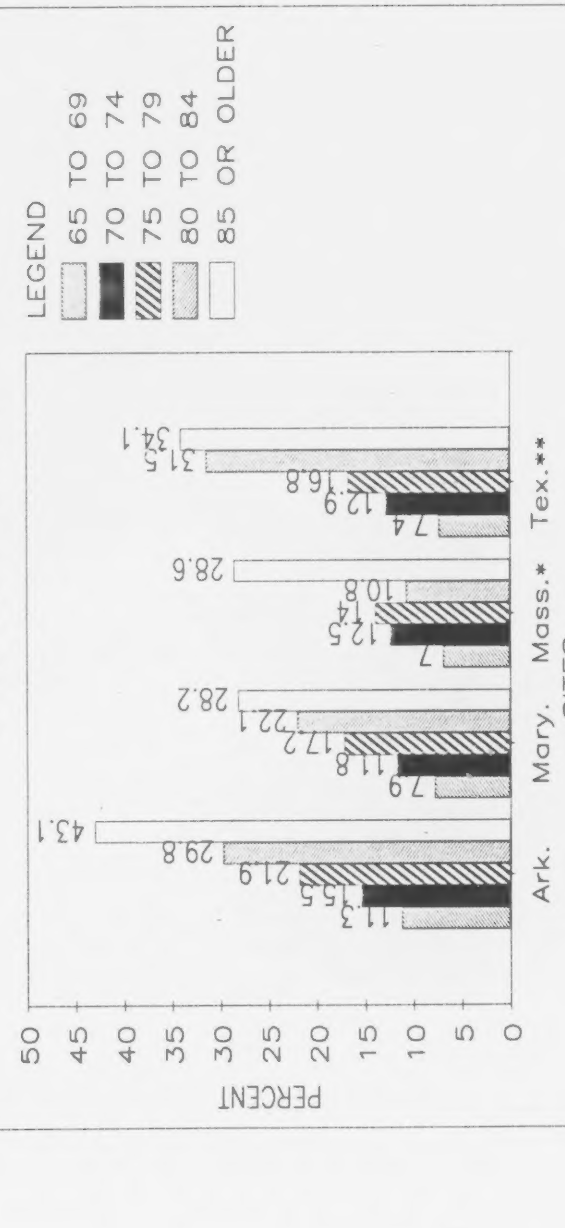
The findings summarized in Figure 19 confirm that expectation. Need for service was defined in this study as reporting a limitation with no help provided or a self report of need for a specific service. Again, only home health or personal care services were counted. Overall, among the cohorts, Massachusetts reports the lowest level of unmet needs and Arkansas the highest.

Figure 18
Use of Home Health and Personal Care Services by Age Cohort in Selected Sites



*Hampden Co. **Dallas/Tarrant Co.

Figure 19
Need for One or More Health or Personal Care Services in Selected Sites



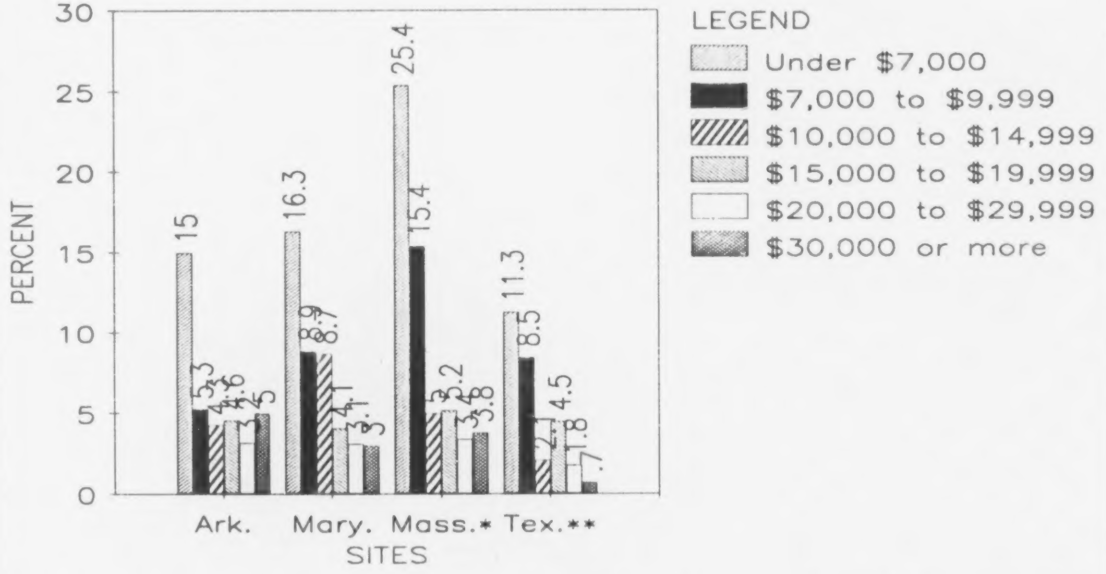
*Hampden Co. **Dallas/Tarrant Co.

Examining those same variables by income category, the utilization of services is substantially higher in Massachusetts among respondents earning less than $10,000 per year than is true for other states (Figure 20). However, higher utilization rates among the lowest income categories is a consistent pattern in all sites and one which would be expected due to eligibility criteria for many services. Among these four states, the general pattern is for the highest levels of usage in Massachusetts and Maryland with Arkansas ranking third and Texas last. Among income groups, the general trend is greater usage among the poorest cohorts and less among upper income groups. This pattern is not portrayed in Arkansas with the $30,000 or more group reporting utilization patterns almost identical to the $7,000-$9,999 group. Unmet need by income groups portrays Arkansas with the highest levels of need among the lowest income groups. The pattern in Texas is perhaps most interesting in terms of supply of available services. Even among the wealthiest Texas elders, unmet need is higher than is true in other sites indicating a lack of available services which can be purchased privately (Figure 21).

These comparisons represent only a few of the findings which will be reported for all sites upon completion of Phase I. At that point, a document will be published which reports the baseline findings across all seven sites and reports the results of the in-depth surveys which are being conducted in each site with individuals who have been

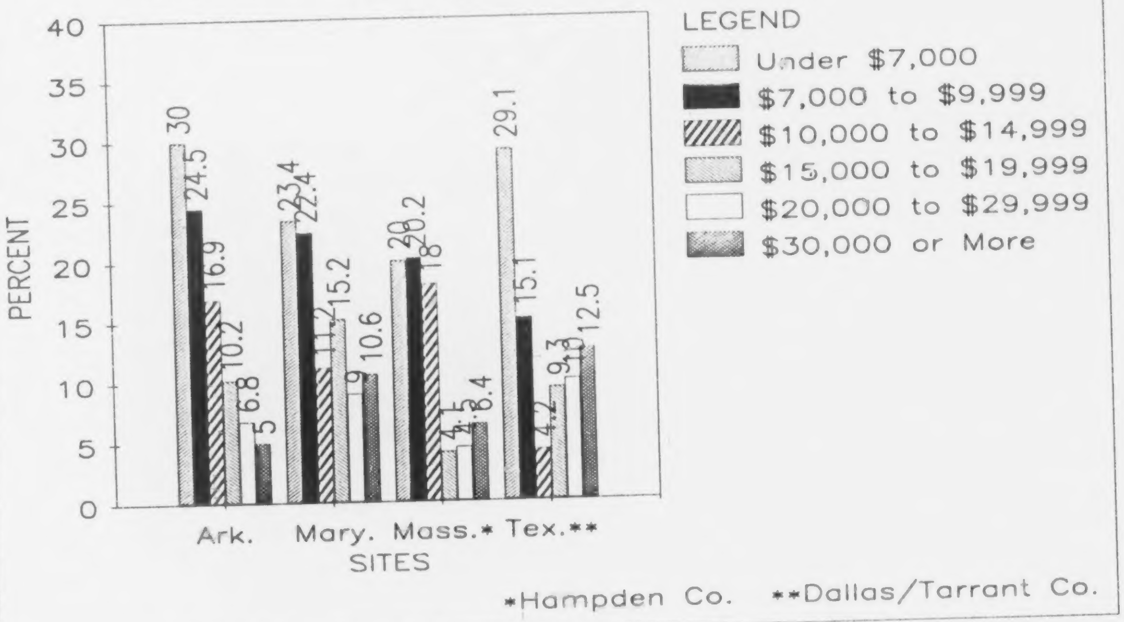
Figure 20

Use of One or More Home Health Or Personal Care Services by Income Groups in Selected Sites



*Hampden Co. **Dallas/Tarrant Co.

Figure 21
Need for One or More Home Health Or Personal Care Services by Income Groups in Selected Sites



hospitalized. Even this cursory examination of the differences in these four sites demonstrates the value of local or state level data sets. Using national averages for planning purposes hides wide ranges of variation among the states and results in inaccurate analyses of needs. The problems in Arkansas are different in magnitude from those in Massachusetts, for example, and different responses to local problems must be developed.

It is hoped by the project staff that readers of this document will ask further questions and discuss the policy questions which findings in these kinds of studies generate. This report represents only the first of many publications to come from this study. Because of the longitudinal nature of the study, planners now have an opportunity to ask further questions which have been raised by these findings.

TECHNICAL NOTES

All rankings comparing the participating sites with all fifty states in the nation were obtained from the **Selected Geographic Resources from the Bureau of Health Profession's Area Resource File (ARF) System for the State of Arkansas**, U.S. Department of Commerce, National Technical Information Service, 1984.

APPENDIX A

Detailed Statistics by Table

TABLE 3-1	χ^2	df	p
#Persons in Household by Region	23.4	14	.0538
#Persons in Household 55+ by Region	35.5	14	.0013
#Persons in Household <55 by Region	44.7	21	.0019
Households with Impaired Member <55 by Region	8.5	7	.2938
Households with Elderly Primary Caregiver by Region	9.8	7	.1978

TABLE 3-2	χ^2	df	p
Annual Household Income Level by Region	92.7	42	.0000

TABLE 3-3	F	df	p
Mean #Persons in Household by Region	2.02	7	.0486
Mean #Household Members 55+ by Region	2.97	7	.0042
Mean #Household Members <55 by Region	3.42	7	.0012
Mean Annual Household Income Level by Region	5.23	7	.0000

TABLE 3-4	χ^2	df	p
Sex by Region	8.9	7	.2593
Race by Region	623.8	14	.0000
Marital Status by Region	69.4	28	.0000

TABLE 3-5	χ^2	df	p
Age Range by Region	77.8	42	.0006

TABLE 3-6	χ^2	df	p
Education Level by Region	161.9	35	.0000

TABLE 3-7	χ^2	df	p
Employment Status by Region	135.2	56	.0000

TABLE 3-8	χ^2	df	p
Annual Household Income Level of Elders by Region	155.0	42	.0000

TABLE 3-9	F	df	p
Mean Age by Region	3.82	7	.0004
Mean Education Level by Region	15.34	7	.0000
Mean Annual Household Income Level by Region	10.31	7	.0000

TABLE 4-1	χ^2	df	p
Hospitalization by Region	14.3	7	.0464
Outpatient Surgery/Emergency Room Treatment by Region	4.6	7	.7134
Outpatient Treatment by Region	5.6	7	.5868
Felt Need for Hospitalization by Region	27.4	7	.0003

TABLE 4-2	χ^2	df	p
Hospitalization by Race	8.0	2	.0185
Outpatient Surgery/Emergency Room Treatment by Race	12.7	2	.0017
Outpatient Treatment by Race	1.3	2	.5143
Felt Need for Hospitalization by Race	31.3	2	.0000

TABLE 4-3	χ^2	df	p
Hospitalization by Household Income	24.5	6	.0002
Outpatient Surgery/Emergency Room Treatment by Household Income	6.7	6	.3478
Outpatient Treatment by Household Income	11.7	6	.0683
Felt Need for Hospitalization by Household Income	77.4	6	.0000

TABLE 4-4	χ^2	df	p
Out-of-Pocket Medical Expenses by Region	53.5	49	.3074

TABLE 4-5	χ^2	df	p
Out-of-Pocket Medical Expenses by Race	29.4	14	.0093

TABLE 4-6	χ^2	df	p
Out-of-Pocket Medical Expenses by Household Income	71.6	42	.0009

TABLE 4-7	χ^2	df	p
Housing Type by Region	52.1	35	.0312
Financial Arrangement for Housing by Region	49.8	14	.0000
% in Retirement Community by Region	42.3	7	.0000
% Needing Major Repairs by Region	8.8	7	.2678

TABLE 4-8	χ^2	df	p
Housing Type by Race	10.8	10	.3722
Financial Arrangement for Housing by Race	42.0	4	.0000
% in Retirement Community by Race	8.6	2	.0138
% Needing Major Repairs by Race	100.7	2	.0000

TABLE 4-9	χ^2	df	p
Housing Type by Household Income	82.6	30	.0000
Financial Arrangement for Housing by Household Income	184.1	12	.0000
% in Retirement Community by Household Income	10.5	6	.1038
% Needing Major Repairs by Household Income	211.8	6	.0000

TABLE 4-10	χ^2	df	p
Means of Transportation by Region	72.5	35	.0002

TABLE 4-11	χ^2	df	p
Means of Transportation by Race	288.9	10	.0000

TABLE 4-12	χ^2	df	p
Means of Transportation by Household Income	675.3	30	.0000

TABLE 4-13	χ^2	df	p
Financial Assistance Needed by Region	87.9	14	.0000
Need Money for Rent/House Payment by Region	13.8	7	.0558
Need Money for Food by Region	18.6	7	.0094
Need Money for Utilities by Region	31.2	7	.0001
Need Money for Medical/Pharmacy Bills by Region	32.3	7	.0000

TABLE 4-14	χ^2	df	p
Financial Assistance Needed by Race	381.6	4	.0000
Need Money for Rent/House Payment by Race	37.3	2	.0000
Need Money for Food by Race	92.9	2	.0000
Need Money for Utilities by Race	134.2	2	.0000
Need Money for Medical/Pharmacy Bills by Race	94.9	2	.0000

TABLE 4-15	χ^2	df	p
Financial Assistance Needed by Household Income	427.8	12	.0000
Need Money for Rent/House Payment by Household Income	44.3	6	.0000
Need Money for Food by Household Income	200.6	6	.0000
Need Money for Utilities by Household Income	246.4	6	.0000
Need Money for Medical/Pharmacy Bills by Household Income	182.9	6	.0000

TABLE 4-16	χ^2	df	p
Physician Services Needed by Region	14.4	7	.0448
Reason for Difficulty in Obtaining Physician's Services by Region	39.8	35	.2664
Lack of money by Region	15.0	7	.0363
No MD in area by Region	10.4	7	.1678
Lack of transportation by Region	2.6	7	.9161
No appointment available by Region	8.6	7	.2864
MD does not take Medicare/Medicaid by Region	6.6	7	.4674
Other reasons by Region	5.8	7	.5683

TABLE 4-17	χ^2	df	p
Physician Services Needed by Race	1.8	2	.4036
Reason for Difficulty in Obtaining Physician's Services by Race	21.1	10	.0197
Lack of money by Race	11.6	[illegible]	.0030
No MD in area by Race	1.6	2	.4461
Lack of transportation by Race	14.1	2	.0009
No appointment available by Race	3.1	2	.2157
MD does not take Medicare/Medicaid by Race	1.0	2	.6173
Other reasons by Race	3.6	2	.1657

TABLE 4-18	χ^2	df	p
Physician Services Needed by Household Income	38.1	6	.0000
Reason for Difficulty in Obtaining Physician's Services by Household Income	40.0	20	.0050
Lack of money by Income	6.2	5	.2845
No MD in area by Income	5.2	5	.3963
Lack of transportation by Income	9.2	5	.1022
No appointment available by Income	5.9	5	.3137
MD does not take Medicare/Medicaid by Income	23.1	5	.0003
Other reasons by Income	11.8	5	.0375

TABLE 4-19	χ^2	df	p
New Housing Arrangement Needed by Region	7.1	14	.9322
Type of New Housing Arrangement Needed by Region	76.4	42	.0009

TABLE 4-20	χ^2	df	p
Employment Desired by Region	26.4	14	.0232
Part-time Work Preferred by Region	5.3	7	.6233

TABLE 4-21	χ^2	df	p
Social Security by Region	38.6	7	.0000
SSI by Region	82.7	7	.0000
Employment Income by Region	26.0	7	.0005
Retirement Income by Region	29.5	7	.0001
Disability Benefits by Region	5.5	7	.6044
AFDC by Region	10.2	7	.1784
Food Stamps by Region	52.1	7	.0000
Unemployment Compensation by Region	11.3	7	.1243
Family Support by Region	14.6	7	.0416
Property/Investment Income by Region	52.0	7	.0000
Utility Assistance by Region	18.2	7	.0113

TABLE 4-22	χ^2	df	p
No Insurance by Region	68.9	49	.0318
Employer/Union Group Plan by Region	44.2	7	.0000
Individual Private Plan by Region	13.6	7	.0590
HMO by Region	12.1	7	.0985
Medicare by Region	21.6	7	.0030
Medicare Supplement by Region	10.3	7	.1709
Medicaid by Region	58.3	7	.0000
Military/VA/Champus by Region	29.7	7	.0001
Other Health Plan by Region	18.3	7	.0108

TABLE 4-23	χ^2	df	p
Senior Center by Region	24.0	7	.0011
Social Groups by Region	18.4	7	.0101
Church/Synagogue by Region	89.2	7	.0000
Physical Exercise by Region	52.1	7	.0000
Continuing Education by Region	22.6	7	.0020
TV/Reading by Region	23.7	7	.0013
Travel by Region	31.5	7	.0001
Theater/Restaurants by Region	82.4	7	.0000
Visiting Friends by Region	23.8	7	.0013

TABLE 4-24	χ^2	df	p
Senior Center by Sex	42.9	1	.0000
Social Groups by Sex	13.5	1	.0002
Church/Synagogue by Sex	73.2	1	.0000
Physical Exercise by Sex	15.1	1	.0001
Continuing Education by Sex	0.4	1	.5193
TV/Reading by Sex	11.2	1	.0008
Travel by Sex	1.0	1	.3162
Theater/Restaurants by Sex	0.4	1	.5028
Visiting Friends by Sex	3.7	1	.0554

TABLE 4-25

	χ^2	df	p
Senior Center by Race	4.2	2	.1247
Social Groups by Race	47.2	2	.0000
Church/Synagogue by Race	42.4	2	.0000
Physical Exercise by Race	147.3	2	.0000
Continuing Education by Race	4.4	2	.1133
TV/Reading by Race	20.0	2	.0000
Travel by Race	98.7	2	.0000
Theater/Restaurants by Race	327.9	2	.0000
Visiting Friends by Race	46.1	2	.0000

TABLE 4-26

	χ^2	df	p
Senior Center by Age	180.9	6	.0000
Social Groups by Age	65.1	6	.0000
Church/Synagogue by Age	54.4	6	.0000
Physical Exercise by Age	142.0	6	.0000
Continuing Education by Age	95.2	6	.0000
TV/Reading by Age	34.8	6	.0000
Travel by Age	253.5	6	.0000
Theater/Restaurants by Age	280.4	6	.0000
Visiting Friends by Age	169.2	6	.0000

TABLE 4-27

	χ^2	df	p
Light Housework by Region	13.8	7	.0550
Cooking by Region	23.3	7	.0015
Feeding Self by Region	5.6	7	.5912
Dressing/Grooming by Region	17.6	7	.0141
Bathing/Shampooing by Region	19.0	7	.0083
Heavy Cleaning/Yardwork by Region	38.6	7	.0000
Business Affairs by Region	15.2	7	.0330
Shopping by Region	4.5	7	.7201
Taking Medication by Region	18.5	7	.0098
Using Toilet by Region	12.2	7	.0935
Bowel/Bladder Accidents by Region	8.2	7	.3124
Using Telephone by Region	5.4	7	.6054
Doing Laundry by Region	13.0	7	.0718
Walking by Region	21.2	7	.0035
Getting Places by Region	20.4	7	.0048
Writing by Region	34.4	7	.0000
Reading by Region	33.1	7	.0000

TABLE 4-28	χ^2	df	p
Light Housework by Sex	107.6	1	.0000
Cooking by Sex	14.7	1	.0001
Feeding Self by Sex	0.0	1	1.0000
Dressing/Grooming by Sex	0.0	1	1.0000
Bathing/Shampooing by Sex	23.5	1	.0000
Heavy Cleaning/Yardwork by Sex	107.2	1	.0000
Business Affairs by Sex	25.1	1	.0000
Shopping by Sex	48.9	1	.0000
Taking Medication by Sex	0.3	1	.5582
Using Toilet by Sex	0.0	1	.9707
Bowel/Bladder Accidents by Sex	19.6	1	.0000
Using Telephone by Sex	4.5	1	.0342
Doing Laundry by Sex	11.3	1	.0008
Walking by Sex	14.5	1	.0001
Getting Places by Sex	25.7	1	.0000
Writing by Sex	12.9	1	.0003
Reading by Sex	9.9	1	.0017

TABLE 4-29	χ^2	df	p
Light Housework by Race	104.8	2	.0000
Cooking by Race	125.0	2	.0000
Feeding Self by Race	8.6	2	.0133
Dressing/Grooming by Race	48.8	2	.0000
Bathing/Shampooing by Race	56.1	2	.0000
Heavy Cleaning/Yardwork by Race	101.8	2	.0000
Business Affairs by Race	51.7	2	.0000
Shopping by Race	76.6	2	.0000
Taking Medication by Race	29.0	2	.0000
Using Toilet by Race	32.0	2	.0000
Bowel/Bladder Accidents by Race	19.1	2	.0001
Using Telephone by Race	28.8	2	.0000
Doing Laundry by Race	96.7	2	.0000
Walking by Race	72.6	2	.0000
Getting Places by Race	122.6	2	.0000
Writing by Race	110.7	2	.0000
Reading by Race	129.2	2	.0000

TABLE 4-30

	χ^2	df	p
Light Housework by Age	298.1	6	.0000
Cooking by Age	343.5	6	.0000
Feeding Self by Age	133.3	6	.0000
Dressing/Grooming by Age	237.1	6	.0000
Bathing/Shampooing by Age	303.7	6	.0000
Heavy Cleaning/Yardwork by Age	425.1	6	.0000
Business Affairs by Age	286.7	6	.0000
Shopping by Age	501.6	6	.0000
Taking Medication by Age	175.7	6	.0000
Using Toilet by Age	177.3	6	.0000
Bowel/Bladder Accidents by Age	178.8	6	.0000
Using Telephone by Age	298.1	6	.0000
Doing Laundry by Age	340.0	6	.0000
Walking by Age	490.2	6	.0000
Getting Places by Age	270.4	6	.0000
Writing by Age	242.7	6	.0000
Reading by Age	313.8	6	.0000

TABLE 4-31

	χ^2	df	p
Light Housework by Household Income	322.2	6	.0000
Cooking by Household Income	137.1	6	.0000
Feeding Self by Household Income	6.5	6	.3676
Dressing/Grooming by Household Income	48.4	6	0000
Bathing/Shampooing by Household Income	106.3	6	.0000
Heavy Cleaning/Yardwork by Household Income	435.5	6	.0000
Business Affairs by Household Income	129.9	6	.0000
Shopping by Household Income	235.9	6	.0000
Taking Medication by Household Income	23.8	6	.0006
Using Toilet by Household Income	31.4	6	.0000
Bowel/Bladder Accidents by Household Income	88.9	6	.0000
Using Telephone by Household Income	26.8	6	.0002
Doing Laundry by Household Income	122.0	6	.0000
Walking by Household Income	216.4	6	.0000
Getting Places by Household Income	210.9	6	.0000
Writing by Household Income	234.8	6	.0000
Reading by Household Income	218.8	6	.0000

TABLE 4-32	χ^2	df	p
Help for Light Housework by Region	26.8	21	[illegible]
Help for Cooking by Region	37.4	21	.0152
Help for Feeding Self by Region	31.3	14	.0050
Help for Dressing/Grooming by Region	38.0	21	.0128
Help for Bathing/Shampooing by Region	24.5	21	.2676
Help for Heavy Cleaning/Yardwork by Region	27.8	21	.1452
Help for Business Affairs by Region	12.8	14	.5424
Help for Shopping by Region	18.5	21	.6191
Help for Taking Medications by Region	11.7	14	.6310
Help for Using Toilet by Region	15.5	21	.7984
Help for Bowel/Bladder Accidents by Region	14.5	21	.8472
Help for Using Telephone by Region	21.0	21	.4561
Help for Doing Laundry by Region	27.1	21	.1684
Help for Walking by Region	20.9	21	.4637
Help for Getting Places by Region	29.3	21	.1074
Help for Writing by Region	31.5	21	.0651
Help for Reading by Region	24.9	21	.2501

TABLE 4-33	χ^2	df	p
Freq of Help for Light Housework by Region	62.0	35	.0032
Freq of Help for Cooking by Region	52.8	35	.0271
Freq of Help for Feeding Self by Region	24.8	28	.6368
Freq of Help for Dressing/Grooming by Region	37.1	35	.3712
Freq of Help for Bathing/Shampooing by Region	35.9	35	.4247
Freq of Help for Heavy Cleaning/Yardwork by Region	42.2	35	.1886
Freq of Help for Business Affairs by Region	30.7	35	.6775
Freq of Help for Shopping by Region	69.8	35	.0004
Freq of Help for Taking Medications by Region	32.6	35	.5826
Freq of Help for Using Toilet by Region	31.9	35	.2786
Freq of Help for Bowel/Bladder Accidents by Region	34.6	35	.4862
Freq of Help for Using Telephone by Region	49.6	35	.0517
Freq of Help for Doing Laundry by Region	42.7	35	.1734
Freq of Help for Walking by Region	36.6	35	.3935
Freq of Help for Getting Places by Region	58.9	35	.0070
Freq of Help for Writing by Region	46.6	35	.0908
Freq of Help for Reading by Region	42.7	35	.1752

TABLE 4-34	χ^2	df	p
Health Status by Region	93.4	28	.0000
Smoking by Region	11.3	7	.1263
Drinking by Region	9.1	7	.2489

TABLE 4-35	χ^2	df	p
Health Status by Sex	2.4	4	.6616
Smoking by Sex	177.0	1	.0000
Drinking by Sex	76.6	1	.0000

TABLE 4-36	χ^2	df	p
Health Status by Race	158.7	8	.0000
Smoking by Race	34.6	2	.0000
Drinking by Race	2.2	2	.3316

TABLE 4-37	χ^2	df	p
Health Status by Age	89.1	24	.0000
Smoking by Age	100.2	6	.0000
Drinking by Age	17.1	6	.0089

TABLE 4-38	χ^2	df	p
Health Status by Household Income	588.5	24	.0000
Smoking by Household Income	5.8	6	.4432
Drinking by Household Income	56.9	6	.0000

TABLE 4-39	χ^2	df	p
Breathing by Region	14.4	7	.0439
Hearing by Region	11.5	7	.1170
Talking by Region	8.8	7	.2710
Understanding by Region	25.8	7	.0005
Stress by Region	11.0	7	.1377
Emotional Problems by Region	7.2	7	.4100
Teeth by Region	22.2	7	.0023
Alzheimer's by Region	7.7	7	.3639
Eye Disease by Region	16.8	7	.0190
Parkinson's by Region	12.6	7	.0832
Kidney Problems by Region	7.7	7	.3572
Heart Condition by Region	17.9	7	.0123
Blood Pressure by Region	41.9	7	.0000
Cancer by Region	1.7	7	.9739
Stroke by Region	12.4	7	.0893
Arthritis by Region	19.5	7	.0067
Diabetes by Region	8.1	7	.3249
Falls by Region	3.4	7	.8442
Memory by Region	37.3	7	.0000
Hardening of Arteries by Region	6.8	7	.4498

TABLE 4-40	χ^2	df	p
Breathing by Sex	0.6	1	.4417
Hearing by Sex	92.4	1	.0000
Talking by Sex	0.5	1	.5012
Understanding by Sex	13.2	1	.0003
Stress by Sex	50.4	1	.0000
Emotional Problems by Sex	0.2	1	.6811
Teeth by Sex	16.3	1	.0001
Alzheimer's by Sex	2.1	1	.1520
Eye Disease by Sex	35.2	1	.0000
Parkinson's by Sex	0.8	1	.3858
Kidney Problems by Sex	13.7	1	.0002
Heart Condition by Sex	7.5	1	.0063
Blood Pressure by Sex	49.9	1	.0000
Cancer by Sex	0.1	1	.8182
Stroke by Sex	3.5	1	.0626
Arthritis by Sex	121.1	1	.0000
Diabetes by Sex	2.6	1	.1042
Falls by Sex	93.3	1	.0000
Memory by Sex	17.7	1	.0000
Hardening of Arteries by Sex	0.9	1	.3497

TABLE 4-41	χ^2	df	p
Breathing by Race	15.0	2	.0006
Hearing by Race	6.6	2	.0377
Talking by Race	2.3	2	.3103
Understanding by Race	63.8	2	.0000
Stress by Race	11.4	2	.0034
Emotional Problems by Race	5.6	2	.0599
Teeth by Race	97.0	2	.0000
Alzheimer's by Race	1.7	2	.4240
Eye Disease by Race	25.2	2	.0000
Parkinson's by Race	0.6	2	.7593
Kidney Problems by Race	11.3	2	.0036
Heart Condition by Race	1.0	2	.5983
Blood Pressure by Race	114.5	2	.0000
Cancer by Race	19.9	2	.0000
Stroke by Race	1.5	2	.4789
Arthritis by Race	29.3	2	.0000
Diabetes by Race	26.0	2	.0000
Falls by Race	3.3	2	.1930
Memory by Race	25.9	2	.0000
Hardening of Arteries by Race	6.1	2	.0471

TABLE 4-42	χ^2	df	p
Breathing by Age	23.9	6	.0006
Hearing by Age	294.5	6	.0000
Talking by Age	42.5	6	.0000
Understanding by Age	126.5	6	.0000
Stress by Age	9.1	6	.1659
Emotional Problems by Age	20.4	6	.0024
Teeth by Age	17.1	6	.0088
Alzheimer's by Age	52.4	6	.0000
Eye Disease by Age	402.1	6	.0000
Parkinson's by Age	23.3	6	.0007
Kidney Problems by Age	88.1	6	.0000
Heart Condition by Age	136.0	6	.0000
Blood Pressure by Age	40.8	6	.0000
Cancer by Age	7.2	6	.3005
Stroke by Age	35.7	6	.0000
Arthritis by Age	131.3	6	.0000
Diabetes by Age	16.2	6	.0127
Falls by Age	190.4	6	.0000
Memory by Age	165.9	6	.0000
Hardening of Arteries by Age	117.9	6	.0000

TABLE 4-43	χ^2	df	p
Breathing by Income	138.7	6	.0000
Hearing by Income	97.4	6	.0000
Talking by Income	7.4	6	.2837
Understanding by Income	130.8	6	.0000
Stress by Income	142.1	6	.0000
Emotional Problems by Income	10.6	6	.0999
Teeth by Income	195.5	6	.0000
Alzheimer's by Income	4.8	6	.5989
Eye Disease by Income	157.5	6	.0000
Parkinson's by Income	7.3	6	.2917
Kidney Problems by Income	130.4	6	.0000
Heart Condition by Income	106.4	6	.0000
Blood Pressure by Income	92.0	6	.0000
Cancer by Income	3.9	6	.6861
Stroke by Income	42.9	6	.0000
Arthritis by Income	246.9	6	.0000
Diabetes by Income	39.4	6	.0000
Falls by Income	115.8	6	.0000
Memory by Income	164.7	6	.0000
Hardening of Arteries by Income	60.9	6	.0000

TABLE 4-44	χ^2	df	p
Breathing Diagnosis by Region	14.4	7	.0450
Hearing Diagnosis by Region	17.8	7	.0131
Talking Diagnosis by Region	7.7	7	.3581
Stress Diagnosis by Region	6.6	7	.4719
Emotional Diagnosis Problems by Region	3.8	7	.8049
Teeth Diagnosis by Region	14.6	7	.0412
Alzheimer's Diagnosis by Region	5.0	7	.6645
Eye Disease Diagnosis by Region	10.6	7	.1569
Parkinson's Diagnosis by Region	2.7	7	.9151
Kidney Problems Diagnosis by Region	10.7	7	.1511
Heart Condition Diagnosis by Region	15.5	7	.0297
Blood Pressure Diagnosis by Region	11.2	7	.1297
Cancer Diagnosis by Region	8.6	7	.2852
Stroke Diagnosis by Region	5.9	7	.5501
Arthritis Diagnosis by Region	7.8	7	.3488
Diabetes Diagnosis by Region	6.5	7	.4821
Memory Diagnosis by Region	13.2	7	.0676
Hardening of Arteries Diagnosis by Region	15.9	7	.0258

TABLE 4-45	χ^2	df	p
Breathing Diagnosis by Household Income	11.5	6	.0753
Hearing Diagnosis by Household Income	25.5	6	.0003
Talking Diagnosis by Household Income	12.1	6	.0595
Stress Diagnosis by Household Income	17.8	6	.0068
Emotional Diagnosis Problems by Household Income	2.5	6	.8698
Teeth Diagnosis by Household Income	24.8	6	.0004
Alzheimer's Diagnosis by Household Income	10.3	6	.1134
Eye Disease Diagnosis by Household Income	5.8	6	.4406
Parkinson's Diagnosis by Household Income	2.7	6	.8425
Kidney Problems Diagnosis by Household Income	8.5	6	.2043
Heart Condition Diagnosis by Household Income	7.0	6	.3240
Blood Pressure Diagnosis by Household Income	4.1	6	.6681
Cancer Diagnosis by Household Income	12.5	6	.0510
Stroke Diagnosis by Household Income	4.3	6	.6397
Arthritis Diagnosis by Household Income	4.5	6	.6116
Diabetes Diagnosis by Household Income	7.7	6	.2636
Memory Diagnosis by Household Income	9.7	6	.1381
Hardening of Arteries Diagnosis by Household Income	6.1	6	.4131

TABLE 4-46	χ^2	df	p
Breathing Restriction by Region	15.9	21	.7732
Hearing Restriction by Region	27.8	21	.1448
Talking Restriction by Region	15.3	21	.8086
Understanding Restriction by Region	24.3	21	.2804
Stress Restriction by Region	28.7	21	.1207
Emotional Restriction by Region	28.2	21	.1347
Teeth Restriction by Region	18.5	21	.6193
Alzheimer's Restriction by Region	19.7	21	.3493
Eye Disease Restriction by Region	24.3	21	.2806
Parkinson's Restriction by Region	21.8	21	.4110
Kidney Restriction by Region	16.8	21	.7204
Heart Restriction by Region	15.7	21	.7868
Blood Pressure Restriction by Region	25.8	21	.2158
Cancer Restriction by Region	35.3	21	.0262
Stroke Restriction by Region	30.4	21	.0841
Arthritis Restriction by Region	17.3	21	.6908
Diabetes Restriction by Region	40.0	21	.0075
Memory Restriction by Region	24.0	21	.2947
Hardening of Arteries Restriction by Region	22.1	21	.3940

TABLE 4-47	χ^2	df	p
Case Management by Region	54.2	14	.0000
Professional Nursing by Region	16.2	14	.3000
Meal at Senior Center by Region	47.9	14	.0000
Home-delivered Meal by Region	23.0	14	.0598
Counseling by Region	17.6	14	.2277
Employment Training by Region	25.9	14	.0263
Health Education by Region	20.0	14	.1298
Day Care by Region	8.7	14	.8494
Respite Care by Region	15.7	14	.3290
Support Group by Region	7.4	14	.9187
Nursing Home by Region	5.9	7	.5465
Legal Services by Region	21.3	14	.0936
Transportation Services by Region	7.2	7	.4055

TABLE 4-48	χ^2	df	p
Case Management by Age	163.6	12	.0000
Professional Nursing by Age	67.4	12	.0000
Meal at Senior Center by Age	121.5	12	.0000
Home-delivered Meal by Age	116.0	12	.0000
Counseling by Age	24.3	12	.0187
Employment Training by Age	50.0	12	.0000
Health Education by Age	15.8	12	.2018
Day Care by Age	68.4	12	.0000
Respite Care by Age	68.7	12	.0000
Support Group by Age	9.7	12	.6448
Nursing Home by Age	35.2	6	.0000
Legal Services by Age	20.1	12	.0647
Transportation Services by Age	33.8	6	.0000

TABLE 4-49	χ^2	df	p
Physical Mobility by Region	40.5	21	.0065
Transportation Access by Region	60.3	21	.0000

TABLE 4-50	χ^2	df	p
Communication by Region	41.0	21	.0056

	F	df	p
(Communication by Region Controlling for Education Level)	3.80	7	.0000

TABLE 4-51	χ^2	df	p
Cognition by Region	67.9	21	.0000

TABLE 4-52	χ^2	df	p
Elder Emotions by Region	24.1	21	.2862

TABLE 4-53	χ^2	df	p
Respondent Emotions by Region	32.9	21	.0469

TABLE 4-54	F	df	p
Chronic Health by Region	31.9	21	.0595

TABLE 4-55	χ^2	df	p
Physical Self Care by Region	40.3	21	.0068
Independent Management by Region	53.2	21	.0001
Overall Independence by Region	61.3	21	.0000

TABLE 4-56	χ^2	df	p
Physical Self Care by Age	595.3	18	.0000
Independent Management by Age	718.4	18	.0000
Overall Independence by Age	787.7	18	.0000

TABLE 4-57	χ^2	df	p
Respondent Social Isolation by Region	25.9	21	.2089

TABLE 4-58	χ^2	df	p
Broad Economic Vulnerability by Region	176.1	35	.0000
Self-Reported Economic Vulnerability by Region	111.2	21	.0000

TABLE 4-59	χ^2	df	p
Severe Physical Mobility Imp by Region	14.2	14	.4326
Severe Transportation Imp by Region	41.0	14	.0002

TABLE 4-60	χ^2	df	p
Severe Communication Imp by Region	30.7	14	.0062

	F	df	p
(Severe Communication Imp by Region controlling for Education Level)	3.33	7	.0020

TABLE 4-61	χ^2	df	p
Severe Cognition Imp by Region	27.2	14	.0182

TABLE 4-62	χ^2	df	p
Severe Elder Emotional Imp by Region	18.5	14	.1831

TABLE 4-63	χ^2	df	p
Severe Respondent Emotional Imp by Region	23.2	14	.0564

TABLE 4-64	χ^2	df	p
Severe Chronic Health Imp by Region	15.1	14	.3682

TABLE 4-65	χ^2	df	p
Severe Chronic Health Imp by Age	195.1	12	.0000

TABLE 4-66	χ^2	df	p
Severe Physical Self Care Imp by Region	17.6	14	.2233
Severe Independent Management Imp by Region	28.4	14	.0125

TABLE 4-67	χ^2	df	p
Intermediate III by Region	41.7	14	.0001
Intermediate II by Region	22.2	14	.0742
Intermediate I by Region	17.9	14	.2112
Skilled Care by Region	14.8	14	.3949

TABLE 4-68	χ^2	df	p
Arkansas Residence by Region	368.2	28	.0000
	F	df	p
Mean Years Residence by Region	38.66	7	.0000

TABLE 4-70	χ^2	df	p
Depend On by Region	1.8	7	.9661
Family Nearby by Region	55.2	7	.0000
Frequency See Them by Region	44.0	21	.0023

TABLE 4-71	F	df	p
Depend On by Sex	1.9	1	.1704
Family Nearby by Sex	1.0	1	.3288
Frequency See Them by Sex	9.3	3	.0254

TABLE 4-72	χ^2	df	p
Depend On by Race	6.6	2	.0369
Family Nearby by Race	3.2	2	.2015
Frequency See Them by Race	38.1	6	.0000

TABLE 4-73	χ^2	df	p
Depend On by Income	42.5	6	.0000
Family Nearby by Income	21.4	6	.0016
Frequency See Them by Income	28.5	18	.0549

TABLE 4-74	χ^2	df	p
MD Visits by Region	70.9	42	.0035

TABLE 4-75	χ^2	df	p
MD Visits by Age	162.8	36	.0000

TABLE 4-76	F	df	p
MD Visits by Light Housework	305.07	1	.0000
MD Visits by Cooking	148.49	1	.0000
MD Visits by Feeding Self	0.60	1	.4404
MD Visits by Dressing/Grooming	70.62	1	.0000
MD Visits by Bathing/Shampooing	107.18	1	.0000
MD Visits by Heavy Cleaning/Yardwork	336.62	1	.0000
MD Visits by Business Affairs	62.29	1	.0000
MD Visits by Shopping	195.34	1	.0000
MD Visits by Taking Medications	45.12	1	.0000
MD Visits by Using Toilet	41.36	1	.0000
MD Visits by Bowel/Bladder Accidents	54.15	1	.0000
MD Visits by Using Telephone	20.33	1	.0000
MD Visits by Doing Laundry	151.06	1	.0000
MD Visits by Walking	217.20	1	.0000
MD Visits by Getting Places	125.23	1	.0000
MD Visits by Writing	161.94	1	.0000
MD Visits by Reading	145.84	1	.0000

TABLE 4-77	F	df	p
MD Visits by Breathing	174.38	1	.0000
MD Visits by Hearing	32.78	1	.0000
MD Visits by Remembering	81.85	1	.0000
MD Visits by Talking	13.18	1	.0003
MD Visits by Understanding	55.20	1	.0000
MD Visits by Stress/Depression	82.04	1	.0000
MD Visits by Other Emotional Problems	26.33	1	.0000
MD Visits by Dental Problems	35.00	1	.0000
MD Visits by Alzheimer's	0.26	1	.6135
MD Visits by Eye Diseases	71.01	1	.0000
MD Visits by Parkinson's	16.92	1	.0000
MD Visits by Kidney Problems	115.09	1	.0000
MD Visits by Heart Condition	307.51	1	.0000
MD Visits by Hardening of the Arteries	77.38	1	.0000
MD Visits by High Blood Pressure	248.45	1	.0000
MD Visits by Cancer	35.86	1	.0000
MD Visits by Stroke	84.56	1	.0000
MD Visits by Arthritis	173.40	1	.0000
MD Visits by Diabetes	152.08	1	.0000
MD Visits by Frequent Falls/Accidents	101.46	1	.0000

TABLE 4-78	χ^2	df	p
Life Style Changes by Region	11.6	7	.1155
Exercise by Region	11.8	7	.1082
Safety by Region	2.1	7	.9511
Stress Management by Region	5.2	7	.6365
Diet by Region	4.8	7	.6854
Medication Management by Region	8.2	7	.3117
Stop Smoking by Region	2.5	7	.9292
Other Change by Region	9.8	7	.2030

TABLE 4-79	χ^2	df	p
Life Style Changes by Education	103.2	5	.0000
Exercise by Education	19.8	5	.0014
Safety by Education	10.3	5	.0684
Stress Management by Education	3.1	5	.6897
Diet by Education	28.4	5	.0000
Medication Management by Education	5.2	5	.3894
Stop Smoking by Education	5.1	5	.4001
Other Change by Education	6.4	5	.2651

TABLE 4-81	χ^2	df	p
Loneliness by Region	7.7	14	.9036
Current Satisfaction by Region	36.1	28	.1407
5 Years Ago by Region	23.6	14	.0515

TABLE 4-82	χ^2	df	p
Loneliness by Age	84.8	12	.0000
Current Satisfaction by Age	29.7	24	.1966
5 Years Ago by Age	57.1	12	.0000

APPENDIX B
PROFILE OF ARKANSAS ELDERS 65 OR OLDER

One of the major purposes of the longitudinal design of this project is to identify pre-retirement elders and track how their needs change over time. A substantial flaw in most current planning data is that cross-sectional samples are studied to project need for services. This cross-sectional approach has limited utility for projections. No current documentation exists to support the contention that the problems exhibited by today's frail elderly are representative of future frail elder cohorts. Many researchers have suggested that today's "young old" cohorts are aging into their later years in better health than was true for their predecessors. Enabling longitudinal tracking of the aging process is a critical goal of this project.

Attention to the need for immediate planning data, however, has not been ignored in this design. This appendix profiles the respondent households in this sample by selecting only those individuals 65 or older. This subgroup represents the majority of elders who have already attained age eligibility for many services. In the major body of this report, findings have focused on pre-retirement as well as retirement age Arkansas residents. Including these younger cohorts provides a better data base for long range planning but may not accurately reflect the current demand on a service system. Therefore, attention in this Appendix is devoted solely to elders 65 or older in this sample.

Table B-1 summarizes the demographic characteristics, ADL limitations and chronic health conditions by region. When focusing solely on the group currently eligible for most services, no differences among regions are noted for sex and age distribution. Concentrations of black elders are in Regions IV, VII, and III, and the lowest levels of educational achievement are found in Regions III and IV. Region VIII reports the highest concentration of retired elders and Region III the lowest. Regions III, IV, and VII report more widowed elders, and Region I reports the highest percentage of married elders among the regions. Lower poverty rates are found in Regions VIII, VI, and I and higher rates in III, VII, and IV.

Since presence of functional limitations or chronic health problems has been identified in other studies as a major predictor of service utilization, these variables are particularly important for identifying current levels of need in communities. Prevalence rates for difficulty cooking, dressing, bathing, doing heavy cleaning or yardwork, taking medication, getting places without help or special transportation, writing and reading vary significantly among the regions. For difficulties cooking which may lead to demand for meals programs, Regions III, VII, and IV report higher prevalence rates and Regions I and VIII the lowest. For difficulty dressing self, Regions VI, VII, IV, and III are clustered together with higher rates. Higher prevalence rates for difficulty bathing are clustered in Regions III, IV and VI, and difficulty with heavy cleaning and yard work is most prevalent in Regions III, V, VI,

TABLE B-1
SUMMARY PROFILE OF ARKANSAS ELDERS 65 OR OLDER BY AAA REGIONS

Characteristic	Percentage of Elders in Region/State								
	I	II	III	IV	V	VI	VII	VIII	AR
Sex									
Male	44.8	43.8	37.1	38.7	38.2	39.6	38.8	40.5	40.2
Female	55.2	56.2	62.9	61.3	61.8	60.4	61.2	59.5	59.8
Race*									
White	98.3	96.5	78.0	62.2	82.4	89.8	73.5	93.2	83.8
Black	0.4	2.7	21.4	37.6	16.5	8.1	25.5	5.5	15.1
Other	1.3	0.8	0.6	0.2	1.0	2.1	1.0	1.4	1.0
Age									
65 to 69	28.3	29.5	31.1	28.9	27.6	25.8	25.4	32.1	28.6
70 to 74	29.5	28.0	30.1	28.8	28.5	34.1	28.0	24.8	29.0
75 to 79	21.6	21.9	18.0	20.7	22.2	22.9	21.9	24.4	21.6
80 to 84	13.9	14.1	12.5	13.2	13.4	11.0	14.4	13.7	13.3
85 or older	6.8	6.5	8.3	8.4	8.2	6.1	10.4	5.0	7.5
Education*									
Less than High School	45.4	57.1	65.1	60.5	42.1	50.2	52.4	54.6	53.5
High School/ GED	27.0	22.6	20.5	21.9	32.4	27.8	28.9	27.6	26.0
Jr. College/ Tech	6.0	5.3	3.9	3.0	5.8	3.2	5.2	3.7	4.5
Some College	7.4	6.3	5.0	8.4	6.6	8.3	5.0	7.3	6.8
College Grad.	9.1	6.9	3.5	4.7	6.4	5.9	5.9	4.3	5.9
Prof./Grad. School	5.1	1.8	2.0	1.4	6.7	4.7	2.7	2.5	3.4
Employment*									
Full-time	4.3	2.9	5.2	3.5	3.6	4.0	2.9	2.5	3.6
Part-time	3.6	4.3	5.0	4.3	3.2	4.2	4.1	3.6	4.1
Retired	75.0	75.2	65.6	70.1	80.1	72.2	74.8	81.1	74.1
Cannot Findd Job	0.8	1.0	1.1	0.2	0.5	-	1.0	-	0.6
Unable for Health	2.3	3.1	5.9	6.9	1.3	4.0	2.3	2.7	3.6
Work at Home	1.1	1.2	2.4	1.6	1.0	1.9	0.6	0.7	1.3
Care for Others	10.1	9.2	8.5	6.7	6.8	6.8	8.5	4.3	7.7
Never or Do Not	2.4	2.8	5.9	6.6	3.2	6.6	5.6	4.8	4.7
Other	0.4	0.2	0.6	0.2	0.2	0.2	0.2	0.2	0.3

TABLE B-1 (CONTINUED)
SUMMARY PROFILE OF ARKANSAS ELDERS 65 OR OLDER BY AAA REGIONS

	Percentage of Elders in Region/State								
Characteristic	I	II	III	IV	V	VI	VII	VIII	AR
Marital Status*									
Never Married	2.6	3.7	2.4	1.9	2.3	1.9	3.2	2.7	2.6
Married	67.9	64.4	54.6	56.2	57.6	62.5	56.1	64.5	60.3
Sep/Divorced	2.1	2.2	2.8	4.3	3.9	2.8	2.8	3.4	3.0
Widowed	27.4	29.7	39.7	37.6	36.2	32.6	37.5	29.4	33.9
Other	0.0	0.0	0.6	0.0	0.0	0.2	0.4	0.0	0.2
Income*									
Less than $3,999	9.9	10.0	8.8	9.8	6.2	5.2	11.9	7.7	8.8
$4,000 to $6,999	25.4	29.5	39.9	31.3	27.0	28.4	32.4	24.4	30.0
$7,000 to $9,999	17.8	23.4	18.7	18.0	22.4	19.5	18.0	25.1	20.2
$10,000 to $14,999	22.6	20.3	14.0	18.2	19.6	16.2	18.9	24.7	19.2
$15,000 to $19,999	8.1	8.4	7.3	10.8	8.1	10.7	8.3	9.0	8.8
$20,000 to $29,999	7.4	4.2	6.0	6.9	6.7	11.9	5.5	2.7	6.4
$30,000 or more	8.7	4.2	5.4	5.0	10.0	8.2	5.0	6.4	6.6
Limitation in Activities of Daily Living									
Light Housework	19.9	16.2	20.8	19.7	18.4	21.6	22.6	17.5	19.6
Cooking*	6.0	7.8	12.1	11.0	9.9	10.0	11.3	7.5	9.5
Feeding Self	0.9	1.2	1.8	2.0	1.5	1.7	1.7	1.1	1.5
Dressing Self*	3.6	3.9	6.3	6.5	4.1	6.6	6.6	3.4	5.1
Bathing Self*	7.1	5.9	10.5	9.8	7.4	9.3	8.5	5.2	8.0
Heavy Cleaning/ Yard*	36.0	38.6	43.4	41.0	43.0	41.5	37.1	32.6	39.3
Handling Business	7.5	7.0	11.2	9.8	8.0	8.9	9.3	6.2	8.6
Shopping	12.0	12.1	12.9	12.7	10.3	12.3	14.9	12.1	12.4
Taking Medication*	5.6	4.3	5.7	6.1	3.8	1.9	4.4	2.7	4.4
Toileting	2.3	2.3	2.9	3.0	4.0	3.2	4.9	2.5	3.1
Bowel/Bladder Problem	7.9	6.5	7.7	7.3	7.3	7.2	7.5	5.9	7.2
Using Telephone	3.8	3.5	5.0	4.3	3.4	2.8	3.6	3.2	3.7
Laundry	8.1	7.4	10.3	7.7	9.2	9.1	10.1	6.8	8.6
Walking w/out Help	16.5	15.7	20.4	18.8	17.5	14.8	17.1	13.4	16.9
Getting Places w/out Help or Special Trans.*	8.6	8.0	12.5	10.8	6.6	12.3	6.4	7.3	9.1
Writing*	6.6	9.2	14.7	10.2	10.8	9.5	9.3	7.5	9.8
Reading*	8.6	9.4	14.9	10.7	13.4	9.5	9.0	8.2	10.6

TABLE B-1 (CONTINUED)
SUMMARY PROFILE OF ARKANSAS ELDERS 65 OR OLDER BY AAA REGIONS

	Percentage of Elders in Region/State								
Characteristic	I	II	III	IV	V	VI	VII	VIII	AR
Chronic Problems									
Breathing*	15.0	18.6	17.6	14.0	14.8	19.1	11.7	16.4	15.9
Hearing	31.0	31.9	29.0	30.0	25.8	29.7	27.4	24.8	28.8
Memory Loss*	14.4	17.8	21.0	17.4	15.8	17.8	17.2	13.0	16.9
Talking/Speaking	2.1	2.5	1.7	2.2	1.6	1.9	2.0	1.6	1.9
Understanding Instructions*	4.9	7.4	9.2	7.5	4.7	5.9	6.7	4.8	6.4
Stress	12.4	13.5	15.1	12.0	12.4	14.4	13.3	11.2	13.1
Emotional Problems	0.9	1.0	1.8	1.0	0.3	1.1	1.1	1.1	1.0
Alzheimer's Disease	1.1	1.2	1.3	0.8	0.2	0.4	0.6	0.5	0.8
Eye Disease	22.7	23.5	25.7	22.9	27.0	23.5	23.9	21.9	23.9
Parkinson's Disease	0.8	0.2	1.3	2.0	0.7	1.5	1.2	0.9	1.1
Kidney Problems	9.4	11.2	10.7	11.6	10.0	9.1	10.7	10.7	10.4
Heart Problems	25.7	26.8	23.9	23.2	27.4	27.3	25.7	25.7	25.7
Hardening of Arteries	10.7	12.5	10.8	11.6	10.7	10.0	10.3	9.3	10.7
Hypertension*	32.3	40.3	38.1	45.5	36.6	39.0	39.8	37.8	38.6
Cancer	5.6	8.4	4.6	4.7	5.8	7.6	6.0	7.3	6.2
Stroke	7.3	6.7	5.0	3.7	6.2	5.5	5.2	5.0	5.6
Arthritis*	53.1	56.4	50.0	53.6	47.2	49.8	51.3	47.2	51.1
Diabetes	11.6	11.4	10.7	10.5	8.2	9.5	8.7	8.7	9.9
Frequent Falls	12.0	14.1	11.4	10.1	11.8	11.0	11.1	10.5	11.5
Broken Bones*	0.8	0.4	2.0	-	0.5	-	-	0.2	0.5
Number	533	511	544	550	549	472	501	439	4100

*Chi square significant at the .05 level.

and IV. Regions IV, III and I report the highest prevalence rates for difficulty taking medication. Regions III and VI report higher prevalence rates of problems getting places out of walking distance without help or special transportation. Region III reports the highest rate of difficulty reading, and Regions III and VI report higher rates of writing difficulty than other regions.

Two probes which resulted in significant differences when considering all the sample failed to achieve statistical significance when analyzing those 65 or older. The prevalence rate for difficulty managing checking and business affairs remains highest in Region III, but the differences among the elders could have occurred by chance. Difficulty walking without assistance also failed to achieve statistical significance when focusing only on those elders 65 or older. No new variables showed significant differences in this group when the younger sample members were excluded from analysis.

In chronic health problems, two variables were eliminated as significantly different among regions when the younger elders were not included. Both eye disease and heart problem prevalence rates did differ significantly among regions when all elders were compared, but no differences are found among the 65 or older by region. Other difficulties which varied for the entire sample also varied for the older group. No new variations were noted.

Table B-2 summarizes the current use and perception of need for specific services. Significant differences are noted only for case management and meals at centers. Use of case management

TABLE B-2
SERVICE USAGE AND NEED FOR SPECIFIC SERVICE BY REGION: ARKANSAS ELDERS 65 OR OLDER

	Percentage of Elders in Region/State								
Service	I	II	III	IV	V	VI	VII	VIII	AR
Case Manager/ Social Worker*									
Use	4.7	6.1	6.3	4.9	3.7	4.2	6.7	3.6	5.0
Need	2.6	4.5	6.1	5.7	3.6	5.1	7.5	5.2	5.0
In-Home Nursing									
Use	1.5	1.4	2.0	2.1	3.2	2.1	2.3	2.1	2.1
Need	0.4	0.4	1.3	0.6	1.1	0.8	1.3	1.4	0.9
Meal at Center*									
Use	5.4	7.8	4.4	4.6	4.6	8.3	7.2	10.5	6.4
Need	0.6	1.4	1.8	1.7	1.9	1.3	2.0	1.6	1.5
Home Delivered Meal									
Use	1.1	1.4	1.5	1.6	1.3	3.0	1.9	2.5	1.7
Need	0.8	0.8	2.8	1.5	2.0	1.7	2.0	1.1	1.6
Move to Nursing Home									
Need	1.1	1.4	1.5	1.0	1.8	0.8	1.0	1.4	1.3
Legal Assistance									
Use	7.1	4.5	5.9	7.1	5.7	8.1	5.2	6.2	6.2
Need	2.4	3.9	1.8	2.4	3.4	4.0	2.3	3.6	3.0
Counseling/Mental Health									
Use	-	0.6	0.7	1.2	0.6	0.6	1.0	1.1	0.7
Need	0.9	1.2	1.7	0.7	1.9	1.3	1.5	2.1	1.4
Employment Training									
Use	0.8	-	0.2	-	0.3	0.2	0.6	0.2	0.3
Need	0.4	-	0.7	0.6	1.0	0.8	0.4	1.1	0.6
Educational Programs									
Use	1.5	2.9	2.9	1.4	3.1	2.8	1.5	1.4	2.2
Need	0.8	1.0	1.3	1.1	1.4	1.3	0.8	1.4	1.1
Day Care									
Use	0.4	0.4	0.2	0.2	0.2	0.2	0.2	0.7	0.3
Ned	0.4	0.4	0.4	0.8	0.3	0.4	0.7	0.7	0.5
Respite									
Use	0.4	0.2	1.7	0.6	0.9	0.6	0.8	0.2	0.2
Need	0.9	0.4	0.6	1.1	0.6	0.4	0.9	0.7	0.7
Family Support									
Use	-	-	0.2	0.2	0.3	-	0.2	0.2	0.1
Need	0.6	0.4	0.4	0.6	0.5	0.2	-	0.5	0.4
Number									

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*Chi square significant at the .05 level or less.

or social worker services is highest in Regions VII, III, and II. Unmet need is highest in VII and III. Region VIII reports the highest utilization of meals programs at centers with Region VI second. Highest unmet need for this service is in Region VII.

Use of and need for case management services is approximately four times greater among the 85 or older than is true for the 65 to 69 cohort. The same utilization ratio applies to in-home, skilled nursing services but the unmet need increases only two-fold with age. Utilization of home-delivered meal services increases significantly with age as does unmet need for this service. Need for nursing home services is six times greater among the 85 or older than the 65 to 69 cohort. Need for adult day care also increases significantly with age. Other services do not vary significantly (Table B-3).

Utilization rates of senior centers increase with age and the rate among Arkansas elders 65 or older is identical to the national average. Within Arkansas, Region VIII reports the highest rate of utilization and Regions III and VII the lowest. Participation in social clubs or groups, church or synagogue, physical exercise, continuing education, visits to theaters and restaurants, visiting friends and traveling all decrease with age. Watching TV and/or reading remains constant (Table B-4).

Participation patterns do vary significantly by region for several activities. Regions VII and IV report the highest levels of participation in religious activities and Region I the lowest. Exercise activities are reported most frequently in Region VIII. Regions I and VIII report highest usage of theater and

TABLE B-3
SERVICE USE AND NEED FOR SPECIFIC SERVICES BY AGE: ARKANSAS ELDERS 65 OR OLDER

	Percentage of Elder in Age Cohart					
Service	65 to 69	70 to 74	75 to 79	80 to 84	85 or older	All
Case Manager/ Social Worker*						
Uses Now	3.1	4.0	5.5	6.2	12.8	5.0
Needs	2.8	4.8	5.1	6.5	11.2	5.0
In-home Nursing*						
Uses	1.0	2.0	1.8	3.5	4.5	2.1
Needs	0.8	0.7	0.9	1.3	1.4	0.9
Meal at Center						
Uses	5.5	5.5	7.8	7.4	8.5	6.5
Needs	1.2	1.7	1.3	1.6	2.7	1.5
Home-Delivered Meal*						
Uses	0.8	0.8	2.5	2.8	4.9	1.7
Needs	0.9	1.1	1.9	2.5	3.4	1.6
Nursing Home*						
Uses	-	-	-	-	-	-
Needs	0.6	0.6	1.6	2.3	3.8	0.9
Legal Services						
Uses	5.9	6.5	5.6	7.3	5.6	6.2
Needs	3.0	3.1	2.8	3.6	2.3	3.0
Counseling/Mental Health						
Uses	0.9	0.9	0.3	0.6	0.7	0.7
Needs	1.5	1.3	0.7	2.2	1.7	1.4
Employment Training						
Uses	0.5	0.2	0.1	0.2	0.4	0.3
Needs	1.2	0.5	0.2	0.2	1.0	0.6
Educational Programs						
Uses	3.0	2.1	2.1	1.6	0.6	2.2
Needs	1.3	1.1	0.6	1.4	1.3	1.1
Day Care*						
Uses	0.3	0.1	0.1	0.4	1.3	0.3
Needs	0.1	0.4	0.3	0.5	2.9	0.5
Number						

*Chi square significant at .05 level or less.

restaurants. Region VIII also reports the highest level of interaction with friends, and individuals in Regions II and VIII are more likely to travel than respondents in other regions (Table B-5).

Much attention at the national policy levels is currently being devoted to the demand for home health and personal care services which may enable elders to stay in their homes and avoid institutionalization for longer periods in their life. Many of the services are supported by Older Americans' Act funding. To determine what the utilization patterns and unmet need for these services are, a grouped variable was developed from several of the individual questions. Individuals who used a formal (paid) service provider for assistance in feeding, dressing, bathing, taking medication, using the toilet or with bowel/bladder accidents, walking or who used a case manager or social worker or in-home nursing services were identified as home health or personal care service users. Individuals who reported needing case management or in-home, skilled nursing or reported difficulties with the above ADLs and no help even from informal services were identified as needing home health or personal care services. A profile of the users of at least one service is presented in B-6. Among the 65 or older cohort in Arkansas, 7.4% use one or more paid, home health or personal care services. No significant differences are identified by region nor does access to insurance affect utilization. Use of services is approximately five times greater among the oldest old than the younger groups, two times greater among non-whites than whites,

TABLE B-4
LEISURE ACTIVITIES BY AGE: ARKANSAS ELDERS 65 OR OLDER

	Percentage of Elders in Age Cohart					
Activity	65 to 69	70 to 74	75 to 79	80 to 84	85 +	All
Senior Centers*	12.7	14.4	17.4	17.1	18.0	15.2
Social Clubs/Groups*	29.4	27.1	25.0	20.1	15.1	25.5
Church/Synagogue*	78.1	81.7	77.8	72.9	61.8	77.2
Physical Exercise*	52.2	49.5	42.6	34.8	28.1	45.3
Continuing Education*	3.6	2.5	2.0	0.7	1.4	2.4
Watch TV/Read	93.1	95.7	94.1	93.9	93.4	94.5
Theater*	61.7	53.8	47.8	40.3	27.5	51.0
Visit Friends*	76.2	74.6	67.0	59.3	46.9	69.3
Travel*	60.6	54.6	45.4	35.7	26.7	49.7
Number						

*Chi square signigicant at the .05 level.

TABLE B-5
LEISURE ACTIVITIES BY REGION: ARKANSAS ELDERS 65 OR OLDER

	Percentage of Elders in Region/State								
Activity	I	II	III	IV	V	VI	VII	VIII	AR
Senior Centers*	15.8	16.8	11.6	12.7	18.2	14.6	12.7	19.4	15.1
Social Clubs/ Groups	27.8	28.2	21.9	26.5	26.9	25.6	23.6	23.2	25.5
Church/Synagogue*	65.9	76.7	78.9	80.4	77.0	75.8	83.9	79.0	77.2
Physical Exercise*	48.6	48.5	39.5	38.0	43.7	47.0	49.1	49.4	45.3
Continuing Education	2.8	3.7	3.3	1.7	1.2	2.3	1.8	2.3	2.4
Watch TV/Read	93.1	95.7	94.1	93.9	93.4	95.6	95.5	95.7	94.7
Theater*	57.2	53.0	45.8	43.1	54.8	52.1	45.7	57.6	51.0
Visit Friends*	70.7	70.5	65.6	66.4	71.4	68.0	67.5	74.5	69.2
Travel*	52.9	54.8	46.9	44.5	48.9	50.2	46.4	53.3	49.6
Number									

*Chi square signigicant at .05 level or less.

TABLE B-6
USE OF HOME HEALTH OR PERSONAL CARE SERVICES AMONG ELDERS 65 OR OLDER:

		Percentage of Elders in Groups	
	(N)	No Services	One or More
State	4100	92.6	7.4
REGION			
I	533	94.0	6.0
II	511	91.8	8.2
III	544	91.0	9.0
IV	550	92.0	8.0
V	549	92.0	8.0
VI	472	94.5	5.5
VII	501	91.2	8.8
VIII	439	94.8	5.2
AGE*			
65 to 69	1182	95.8	4.2
70 to 74	1198	93.8	6.2
75 to 79	888	92.7	7.3
80 to 84	546	89.6	10.4
85 or older	310	81.0	19.0
RACE*			
White	3455	93.7	6.3
Black	623	87.1	12.9
Other	42	84.6	15.4
SEX*			
Male	1657	95.0	5.0
Female	2466	91.1	8.9
INCOME*			
Under $3,000	87	83.4	16.6
$3,000 to $3,999	172	89.2	10.8
$4,000 to $4,999	379	81.0	19.0
$5,000 to $6,999	501	86.6	13.4
$7,000 to $9,999	598	94.7	5.3
$10,000 to $14,999	566	95.8	4.2
$15,000 to $19,999	260	95.4	4.6
$20,000 to $29,999	188	96.9	3.1
$30,000 or more	196	95.0	5.0
HAS INSURANCE			
No Insurance	81	92.7	7.3
One or More Policies	4042	92.6	7.4
GOVERNMENT INSURANCE*			
None	266	95.5	4.5
One	1811	93.9	6.1
Two	1911	91.6	8.4
Three	135	84.7	15.3

*Chi square significant at the .05 level or less.

and three times greater among the lower income elders than those earning more than $7,000 per year. Older women report higher utilization than men.

Table B-7 profiles the individuals who need but do not receive one or more of those same services. These groups are not mutually exclusive since an individual may receive one or more and need others. This measure of unmet need is very conservative in its estimates since individuals who receive informal help may actually need more skilled, formal services or individuals who are receiving some formal help may actually need more than is available. This measure identifies only those individuals who have limitations and who have no help at all.

Need for service does vary by region. Unmet need is highest in Regions III and VII. More than two-fifths of the 85 or older have at least one unmet need for these services and unmet need is highest among non-whites, females and lowest income respondents (Table B-7).

Another method for identifying those individuals most likely to access or need services is to look at clusters of symptoms rather than single item variables. Table B-8 profiles the grouped impairment variables by region for the 65 or older. The single variables used to develop the grouped impairment categories are detailed in Chapter 4.0.

Significant variations are noted among regions for four categories. Transportation limitations are greatest in Regions VI and IV. Cognitive impairments are more prevalent in III and II. Multiple impairments in independent living skills are more

TABLE B-7
UNMET NEED FOR HOME HEALTH OR PERSONAL CARE SERVICES: ARKANSAS ELDERS 65 OR OLDER

State	(N)	Percentage of Elders in Groups No Unmet Needs	One or More
REGION*			
I	533	81.6	18.4
II	511	82.0	18.0
III	544	76.7	23.3
IV	550	80.3	19.7
V	549	79.3	20.7
VI	472	82.6	17.4
VII	501	76.7	23.3
VIII	439	83.8	16.2
AGE*			
65 to 69	1182	88.6	11.4
70 to 74	1198	84.4	15.6
75 to 79	888	77.9	22.1
80 to 84	546	70.4	29.6
85 or older	310	57.2	42.8
RACE*			
White	3307	82.3	17.7
Black	623	69.3	30.7
Other	42	78.7	21.3
SEX*			
Male	1657	85.3	14.7
Female	2466	76.9	23.1
INCOME*			
Under $3,000	87	73.6	26.4
$3,000 to $3,999	172	73.3	26.7
$4,000 to $4,999	379	63.2	36.8
$5,000 to $6,999	501	72.9	27.1
$7,000 to $9,999	598	75.3	24.7
$10,000 to $14,999	566	82.9	17.1
$15,000 to $19,999	260	89.8	10.2
$20,000 to $29,999	188	93.3	6.7
$30,000 or more	196	95.0	5.0
INSURANCE			
No Insurance	81	77.2	22.8
One or More	4042	80.4	19.6
GOVERNMENT INSURANCE			
None	266	81.0	19.0
One	1811	79.8	20.2
Two	1911	80.8	19.2
Three	135	78.9	21.2

*Chi square significant at the .05 level or less.

TABLE B-8
GROUPED IMPAIRMENT PREVALENCE RATES FOR ARKANSAS ELDERS 65 OR OLDER BY REGION

	Percentage of Elders in Region/State								
Impairment	I	II	III	IV	V	VI	VII	VIII	AR
Mobility Impairment									
Unimpaired	77.3	75.9	73.5	76.1	75.5	79.0	76.2	81.8	76.8
One Impairment	16.1	18.0	19.5	18.9	19.2	16.1	19.4	12.3	17.6
Two Impairments	6.6	6.1	6.6	4.9	5.3	4.9	4.5	5.9	5.6
Three or More Impairments	-	-	0.4	-	-		-		
Transportation Limits*									
No Limitations	79.2	78.3	70.8	71.1	76.6	75.2	77.6	79.5	75.9
One Limitation	15.0	14.5	21.5	20.6	19.2	16.5	16.6	13.4	17.3
Two Limitations	4.7	5.7	6.4	8.2	3.8	6.6	5.1	6.4	5.8
Three or More	1.1	1.6	1.3	0.2	0.4	1.7	0.7	0.7	0.9
Communication Impairments									
Unimpaired	53.1	50.5	48.5	50.8	51.8	53.8	52.6	59.2	52.4
One Impairment	29.8	31.1	29.4	31.2	28.3	27.8	30.4	24.4	29 2
Two Impairments	9.9	9.6	10.7	9.5	10.1	10.4	10.2	10.0	10.0
Three or More	7.1	8.8	11.4	8.4	9.8	8.1	6.8	6.4	8.4
Cognitive Impairment*									
Unimpaired	79.5	76.1	70.0	74.0	78.0	75.2	76.2	82.5	76.3
One Impairment	15.0	15.9	21.1	18.7	16.1	18.0	16.2	12.3	16.8
Two Impairments	4.1	6.7	5.1	5.7	4.9	5.5	5.2	3.9	5.2
Three or More	1.3	1.4	3.7	1.7	1.0	1.3	2.3	1.4	1.8
Emotional Impairment									
Unimpaired	86.5	85.5	83.1	87.2	86.4	84.3	85.0	86.6	85.6
One Impairment	12.8	12.7	14.5	10.6	12.0	14.2	13.5	11.4	12.7
Two Impairments	0.8	1.8	2.4	2.2	1.4	1.3	1.0	2.1	1.6
Three or More	-	-	-	-	0.2	0.2	0.4	-	0.1
Chronic Health Impairment									
Unimpaired	15.8	12.3	15.4	14.2	15.3	15.3	15.3	17.3	15.1
One Impairment	24.8	21.9	25.9	23.0	25.5	25.2	22.6	25.5	24.3
Two Impairments	21.4	21.9	19.5	20.7	20.7	19.3	23.8	21.0	21.0
Three or More	38.1	43.8	39.2	42.2	38.4	40.3	38.4	36.2	39.6
Self Care Impairments									
Unimpaired	79.4	79.6	73.7	75.8	77.4	78.4	76.2	82.5	77.8
One Impairment	12.0	12.9	16.0	14.5	13.7	11.4	14.8	11.4	13.4
Two Impairments	3.8	3.5	4.4	2.8	3.1	4.4	2.5	2.7	3.4
Three or More	4.9	3.9	5.9	6.9	5.7	5.7	6.5	3.4	5.4
Independent Living Impairments*									
Unimpaired	56.5	56.9	48.7	54.5	51.6	52.1	55.7	61.5	54.5
One Impairment	19.5	19.6	23.9	18.6	24.1	20.1	17.7	16.2	20.1
Two Impairments	7.3	10.0	8.8	9.1	8.6	10.6	10.2	8.4	9.1
Three or More	16.7	13.5	18.6	17.8	15.7	17.2	16.4	13.9	16.3

TABLE B-8 (CONTINUED)
GROUPED IMPAIRMENT PREVALENCE RATES
FOR ARKANSAS 65 OR OLDER BY REGION

	Percentage of Elders in Region/State								
Impairment	I	II	III	IV	V	VI	VII	VIII	AR
Respondent Only Emotional Impairment									
Unimpaired	64.1	56.0	59.0	62.7	60.8	60.9	59.1	65.0	60.9
One Impairment	27.0	28.2	26.4	26.4	26.8	23.2	27.0	21.9	26.0
Two Impairments	5.3	12.1	9.3	5.3	8.8	10.3	10.5	9.2	8.8
Three or More	3.6	3.7	5.3	5.6	3.6	5.6	3.3	3.9	4.3
Respondent Only Potential Isolation									
Not Isolated	29.7	30.0	32.9	32.3	33.9	29.1	28.2	38.2	31.7
One Problem	43.9	44.6	43.8	42.5	43.0	41.7	46.6	40.3	43.4
Two Problems	21.7	18.9	17.1	18.4	17.0	21.5	17.7	15.9	18.5
Three or More	4.7	6.5	6.2	6.8	6.1	7.6	7.5	5.7	6.4
Economic Vulnerability*									
No Problems	20.6	18.4	18.0	14.9	24.0	22.7	18.2	24.4	20.0
One Problem	35.5	27.0	25.2	27.4	29.4	28.8	24.4	34.6	28.9
Two Problems	17.8	21.9	18.2	16.4	18.1	19.7	18.5	17.3	18.5
Three Problems	10.1	13.9	12.5	13.0	9.3	10.2	17.4	10.7	12.1
Four to Five Problems	11.3	12.1	15.6	16.3	11.0	11.7	15.7	9.1	12.9
Six or More	4.7	6.7	10.5	12.1	8.2	7.0	5.7	3.9	7.5
Number									

*Chi square significant at the .05 level or less.

prevalent in Regions III and VI. Economic vulnerability is greatest in Regions IV and III.

Although no differences among regions are noted for chronic health impairment, the overall prevalence rate of these kinds of problems is higher in Arkansas than for the nation as a whole. This finding is partially a reflection of the older average age in Arkansas. However, this difference is again an illustration that decisions concerning service delivery should not be made from national data unless no other guidelines ar available. The characteristics of a region or a state often vary substantially and the most efficient and effective decisions can be made when local characteristics are uppermost in the planning process.

BIBLIOGRAPHY

Fillenbaum, Gerda G., 1978. "Validity and Reliability of the Multidimensional Functional Assessment Questionnaire," Multidimensional Functional Assessment: The OARS Methodology. Durham, North Carolina: The Center for the Study of Aging and Human Development.

Harlow, Karen S., and Mark S. Rosentraub, 1984. A Pilot Study to Develop a Methodology to Identify by Disability and by Location Individuals in the General Population Who Have Disabling Conditions. Austin, Texas: Texas Rehabilitation Commission.

Herzog, A. Regula, and Lynn Dielman, 1985. "Age Difference in Response Accuracy for Factual Survey Questions," Journal of Gerontology, Vol. 40, May, pp. 350-357.

Maddox, G. L. and Douglass, E. B., 1973. "Self-Assessment of Health," Journal of Health and Social Behavior. Vol. 14, pp. 87-93.

McKinlay, John B., 1985. "Health Care Utilization by the Elderly: Special Considerations, Methodololgical Developments and Theoretical Issues, NIA and NCHSR Workshop on Aging and Health Care, September 26-27, Bethesda, Maryland.

Rowe, J. W., 1983. "Systolic Hypertension in the Elderly," New England Journal of Medicine, Vol. 309, pp. 1246-7.

Siemiatycki, J., 1979. "A Comparison of Mail, Telephone, and Home Interview Strategies for Household Health Surveys," American Journal of Public Health, Vol. 69, pp. 238-245.

Siemiatycki, J., R. Campbell, L. Richardson, and D. Aubert, 1984. "Quality of Response in Different Population Groups in Mail and Telephone Surveys," American Journal of Epidemiology. Vol. 120: 302-314.

Siemiatycki, J., and S. Campbell, 1984. "Nonresponse Bias and Early Versus All Responders in Mail and Telephone Surveys," American Journal of Epidemiology, Vol. 120, pp. 291-301.

GLOSSARY

ELDERS	Individuals age 55 or older
FORMAL HELP	Assistance from a formal agency (church, government agency, volunteer organization, etc.) or a paid professional or nonprofessional
HOUSEHOLDS	Family units residing together that contain at least one individual age 55 or older
INFORMAL HELP	Assistance from a family member or friend
OTHER	In racial or ethnic group tables, "other" refers to American Indian, Hispanic or Mexican American, Asian or Pacific Islander, or other non-specified racial or ethnic groups
RESPONDENT	The elder who actually responded to the telephone interview
SPECIAL TRANSPORTAION	Senior citizen or church van or bus

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AGING ARKANSAS:
FOCUS ON CAREGIVING

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ARKANSAS CAREGIVER STUDY

1.0 INTRODUCTION

One of the most serious problems challenging all levels of government and the private sector will be the financing and delivery of long-term care services to elders with chronic illnesses (Burwell, 1986). This challenge is particularly critical in Arkansas which ranks second among all the states in terms of percent of elders in the population. In 1986, the Arkansas Association of Area Agencies on Aging in cooperation with the Arkansas Division of Aging and Adult Services launched a comprehensive, longitudinal planning effort entitled the **Arkansas Longitudinal Study on Health and Aging (ALSHA)**. This project was developed to provide ongoing planning support to state and local decision makers to address the challenges of structuring and providing appropriate services for an increasingly aging population.

From the inception of this random study of more than 6,000 Arkansas elders, one of the major goals was to provide, in addition to a needs assessment and study of changing demands and unmet needs, an in-depth examination of family caregiving. As state and federal policy makers confront the dilemma of service provision over the next fifty years, they will attempt to discern the appropriate balance between the obligations of family members and the obligations of government in meeting needs. Clearly, the obligation must be shared; neither government nor families have the requisite resources to meet the demand for care. But the development of appropriate policies and services to assist families in caring for their dependent elders requires reliable and scientifically sound data bases on which to base policy recommendations.

This report is organized to provide that support. The first section reviews and summarizes relevant data from the baseline study conducted in 1986, and the second part describes an in-depth, special study focused on primary caregivers of dependent elders. New data were collected from the primary caregivers of dependent elders concerning their own chronic health, functional impairments and service needs as well as the impact of caregiving on their careers, economic status and their mental health. When comparable measures exist, Arkansas findings are presented with the findings from the 1982 National Long Term Care Survey (NLTCS), a nationally representative sample of more than 6,000 primary and secondary caregivers of dependent elderly.

1.1 The Arkansas Longitudinal Study on Health and Aging

In the first year of research for the ALSHA, eight separate samples were selected--one from each Area Agency on Aging. More than 4,000 households participated in the survey and information was gathered for more than 6,100 elders 55 or older.

In that study, functional impairments in activities of daily living (ADLs) were defined through self reports of difficulty feeding oneself; bathing or shampooing; dressing/grooming; toileting; problems with bowel or bladder accidents; and difficulty walking without canes, crutches, or assistance from wheelchairs or from another person. Instrumental Activities of Daily Living (IADLs) were measured by questions concerning problems cooking, doing light housework or normal chores; doing yardwork or heavy cleaning; doing laundry; using the telephone; shopping; managing self medication; conducting business affairs or balancing a checking account; and getting places outside walking distance without special transportation or other assistance.

Focusing only on the 65 or older portion of the ALSHA sample, almost half the elders have at least one ADL or IADL limitation, and 15% report four or more. Six percent of the elders in the community-based sample meet the definitions for at least one level of care in a nursing home, and 1% represent a level of difficulty parallel to that required for skilled nursing facilities. Slightly more than 7% are using at least one formal, in-home health or personal care service to address an ADL limitation, 8.5% are using at least one or more informal sources, and 19.7% report at least one ADL limitation for which they are receiving neither informal nor formal assistance (Harlow, Pickard, Rosentraub, and Wilson, 1987). More than one-fifth of the 65 or older group are using at least one formal, in-home source of service assistance for an IADL impairment. More than 27% are using one or more informal sources, and 14.7% report at least one IADL limitation for which they are receiving neither formal nor informal services.[1] Slightly more than one-quarter of the 65 or older sample report using at least one community-based service which may address either ADL or IADL difficulties.

These services are delivered in the community rather than the home. Almost 8% report a need for such services which is not currently met.

Within this milieu of unmet needs and varying mixes of formal and informal service utilization, the study of family caregivers was designed. The importance of these caregivers has long been recognized in aging and service delivery policy, since more than four-fifths of all assistance to elders is delivered by an unpaid, informal source (Kane and Kane, 1986). When determining the levels of unmet need for services and the already existing demand on informal sources of assistance, the importance of a study of caregivers in Arkansas assumes paramount importance.

1.2 The Arkansas Caregiver Study (ACS)

To develop the information source concerning caregivers in the state, several steps were taken during the initial phases of the statewide ALSHA. First, during the screening process, age-ineligible households (where no member was 55 or older) were asked if anyone in that household performed caregiving duties for an elder. Second, a criteria statement was developed for determining the appropriate cases to select from the ALSHA for recall interviews of caregivers. Figure 1-1 summarizes the criteria for inclusion. A frequency run of participants in the initial survey who met the criteria produced an unduplicated list of 1504 households with an elder who either 1) received more than weekly assistance with one or more ADLs, or 2) was frequently or constantly restricted by one or more chronic health problems. The 1504 files were reviewed to determine whether the elders' circumstances actually reflected a caregiving relationship. The screening process resulted in 378 files that contained potential caregiving cases, and the age-ineligible households provided a list of an additional 38 households in which a younger person was providing care to an older person in another household at the time of the original screen.

A second interpretive process further eliminated individuals only with chronic health problems and no ADL or IADL limitations resulting in an eligible pool of 364 individuals. Fifteen percent of the caregivers identified refused to participate. In 4.4% of the households, field staff were unable to determine what had happened to the elder during the approximately 10 month interim since first screening. For these households, no answer was obtained at either the target phone

FIGURE 1-1

CRITERIA FOR SELECTING CAREGIVER CASES

1. Reviewed all files in which an elder:
    a. received assistance with an ADL more than once a week;
    b. had a health problem that frequently or constantly restricted him/her.
2. Rejected files in which the only sources of assistance were:
    a. paid helpers;
    b. formal providers.
3. Rejected files in which IADL assistance was for only one of the following:
    a. reading and/or writing;
    b. heavy cleaning and/or yardwork;
    c. light housework;
    d. shopping;
    e. getting places outside walking distance;
    f. laundry;
    g. business affairs;
    h. making telephone calls;
    i. cooking weekly or less often;
    j. taking medications weekly or less often;
5. Accepted files in which assistance for limitations in activities of daily living:
    a. feeding self;
    b. dressing/grooming;
    c. bathing/shampooing;
    d. toileting;
    e. bowel/bladder accidents;
    f. walking or getting around.
6. Accepted files in which assistance was for IADL activities of daily living if the following criteria were met:
    a. assistance in cooking more than weekly;
    b. assistance in taking medications more than weekly;

    c. assistance in several IADLs weekly or more often.

number or at the referral phone number obtained at first interview for use if the elder him/herself could not be reached during the recontact phase. An additional 4.4% had moved out of state since the first interview period and thus, were eliminated from the sample. Disconnected phone messages were obtained for 2% of the respondents. Almost 8% of the dependent elders had died during the 10 month period since first contact, and those unable to be reached may well also have fit in this category. Four individuals were unable to participate due to extreme hearing disabilities. In the baseline survey, hearing disabled were contacted for face-to-face interviews, but during this recontact phase, these four, representing 1%, were eliminated from the caregiver study since no resources existed for face-to-face interviews. Two individuals provided only partial data and were excluded from the final analysis.

Perhaps the two most interesting categories of non participants in the recontact process are the 8.6% who insisted that they could not be considered caregivers since any service they performed was returned in some way by the dependent elder. In other words, the dependent elder served as a caregiver for the caregiver.

The entire research protocol for the ALSHA rests on the assumption that the individual's definition of problems is more predictive of the use of services than is any impartial, objective attempt to assess problems. This assumption has been validated in the literature and is documented in the Year One Report. Thus, when these individuals who were identified by the "research protocol definition" did not concur with the researcher's interpretation of their activities, they were eliminated from the study. The final non-participant category is also of interest and of policy importance. In more than 11% of the recontacts, assistance had been terminated during the 10 month interim. This figure is lower than the 16% rate found in the NLTCS (Stone, Cafferata, Sangl, 1987). These individuals represented situations where assistance had been of a temporary nature and the assistance was no longer required by the dependent elder. The final 164 caregivers and 164 dependent elders represent a small, random sample of households in Arkansas where caregiving responsibilities of a frequent nature and for ADL/IADL limitations have been ongoing for usually at least one year. Although the sample is small, it provides an important contribution to the caregiving literature where many such studies have been based on non-representative samples identified from current service users or participants in caregiving support programs.

2.0 ARKANSAS CAREGIVERS AND DEPENDENT ELDERS: DEMOGRAPHIC CHARACTERISTICS

2.1 Caregiver Characteristics

Throughout this report, comparisons will be presented between the Arkansas caregivers studied and a nationally representative sample gathered in 1982 as part of the National Long Term Care Survey (NLTCS). This national sample of more than 6,000 informal caregivers, both primary and secondary, represents the most comprehensive data base existing on caregivers. However, as is true of all nationally representative samples, observed patterns may not be accurate at the state level. Service utilization patterns and needs are influenced by state policies which cannot be reflected in national data bases. The Arkansas Caregiver Supplement (ACS) to the Arkansas Longitudinal Study on Health and Aging (ALSHA) represents an opportunity to study a representative sample of Arkansas caregivers in depth and compare their characteristics and needs to those identified nationally.

Caregivers in the Arkansas sample reflect similar demographic characteristics to those identified for primary caregivers in the NLTCS. In that national sample, 72% of the caregivers were female, and 28% were male. In Arkansas, 76.8% are female, and 23.2% are male. (Figure 2-1). Age distribution of caregivers in the Arkansas sample also closely parallels the findings from the NLTCS. Figure 2-2 presents the composition of both samples. In the national sample, slightly more than one-fifth were younger than 45 years. More than two-fifths were between the ages of 45 and 64; one-quarter were between 65 and 74; and just over 10% were 75 or older. In Arkansas, almost one-quarter were younger than 45 years; almost 45% were between 45 and 64; almost one-fifth were between 65 and 74; and almost 13% were 75 or older. Average age for the Arkansas caregiver is 55 with ages in this sample ranging from 14 to 94.

More than one-quarter of the Arkansas caregivers, 28.6%, are non-white compared to one-fifth, 20.5%, of the national sample (Figure 2-3). Fourteen percent of the caregivers have never married, 70.1% are married and 15.9% are either separated, divorced, widowed or "other." These Arkansas figures are almost identical to the national figures (Figure 2-4). Findings concerning place

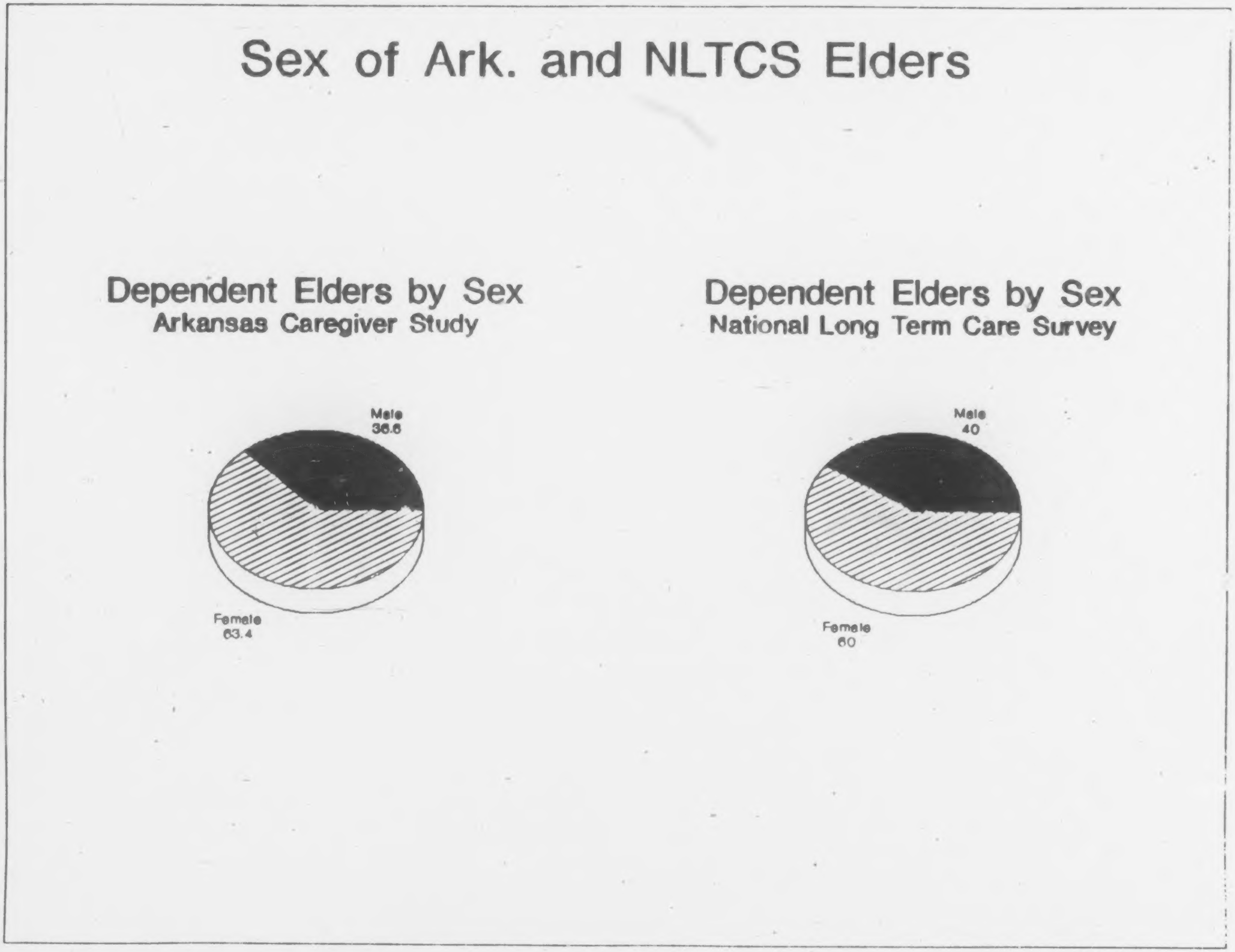

Sex of Ark. and NLTCS Elders
Dependent Elders by Sex
Arkansas Caregiver Study
Male
36.6
Female
63.4
Dependent Elders by Sex
National Long Term Care Survey
Male
40
Female
60

Figure 2-1

Age Composition of Caregivers

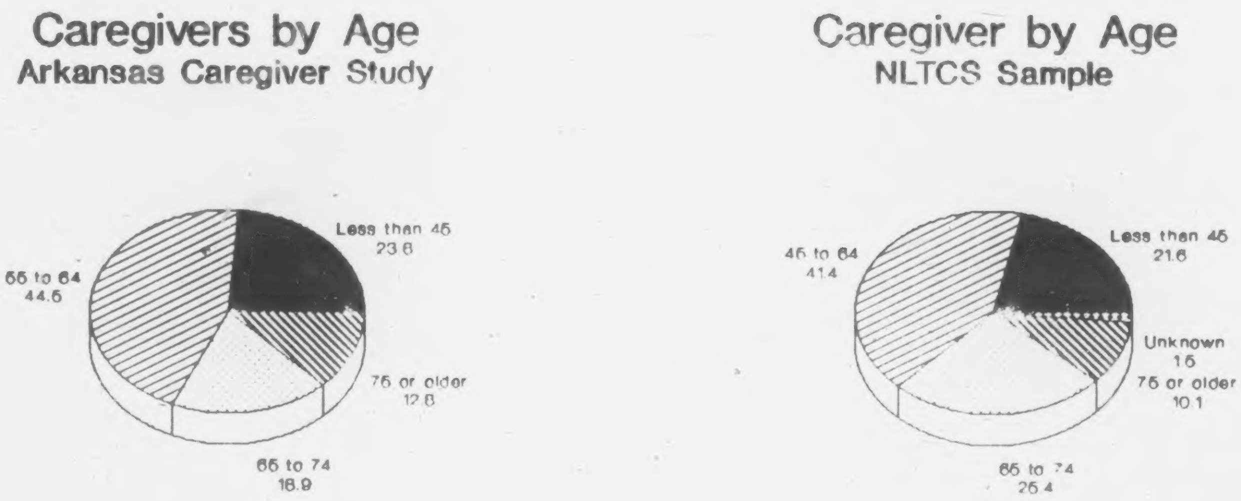
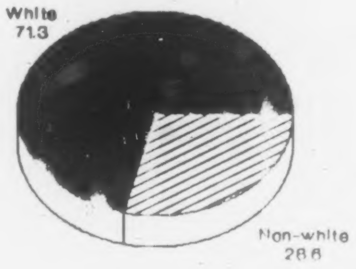


Figure 2-2

Racial Composition of Caregivers

Caregivers by Race
Arkansas Caregiver Study



Caregivers by Race
NLTCS Sample

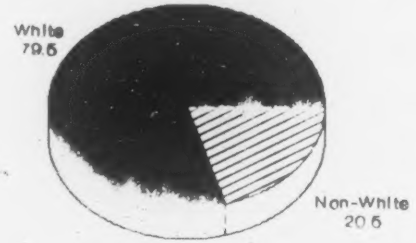
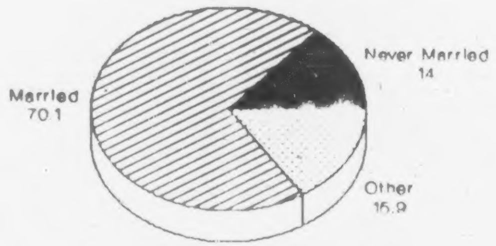


Figure 2-3

Marital Status of Caregivers

Caregivers by Marital Status
Arkansas Caregiver Sample



Caregivers by Marital Status
NLTCS Sample

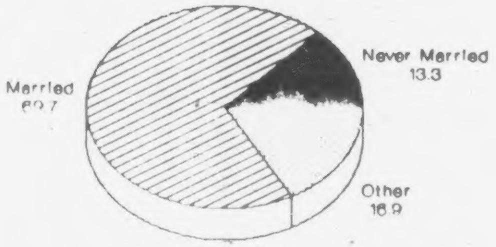


Figure 2-4

of residence of caregiver vary only .1% from the national figures. Almost three quarters of Arkansas caregivers, 73.8%, live with the dependent elder for whom they care (Figure 2-5).

In the Arkansas sample, caregiving responsibility is most likely to be performed by children of the dependent elder, 43.9%. Almost 38% are spouses, and 18% are some other relation, primarily daughters-in-law or granddaughters. Of the child caregivers, almost 85% are daughters and of spouses 62% are wives (Figure 2-6).

Almost 26% of the Arkansas sample are employed full time, 7.3% work outside the home part-time; 33.5% are retired; and 32.6% indicate they do not work in order to care for dependent elders or because of their own health problems prevent them from employment (Figure 2-7). Forty-four percent completed less than a high school education; 32% completed high school, and 24% attended or completed postsecondary or college level work.

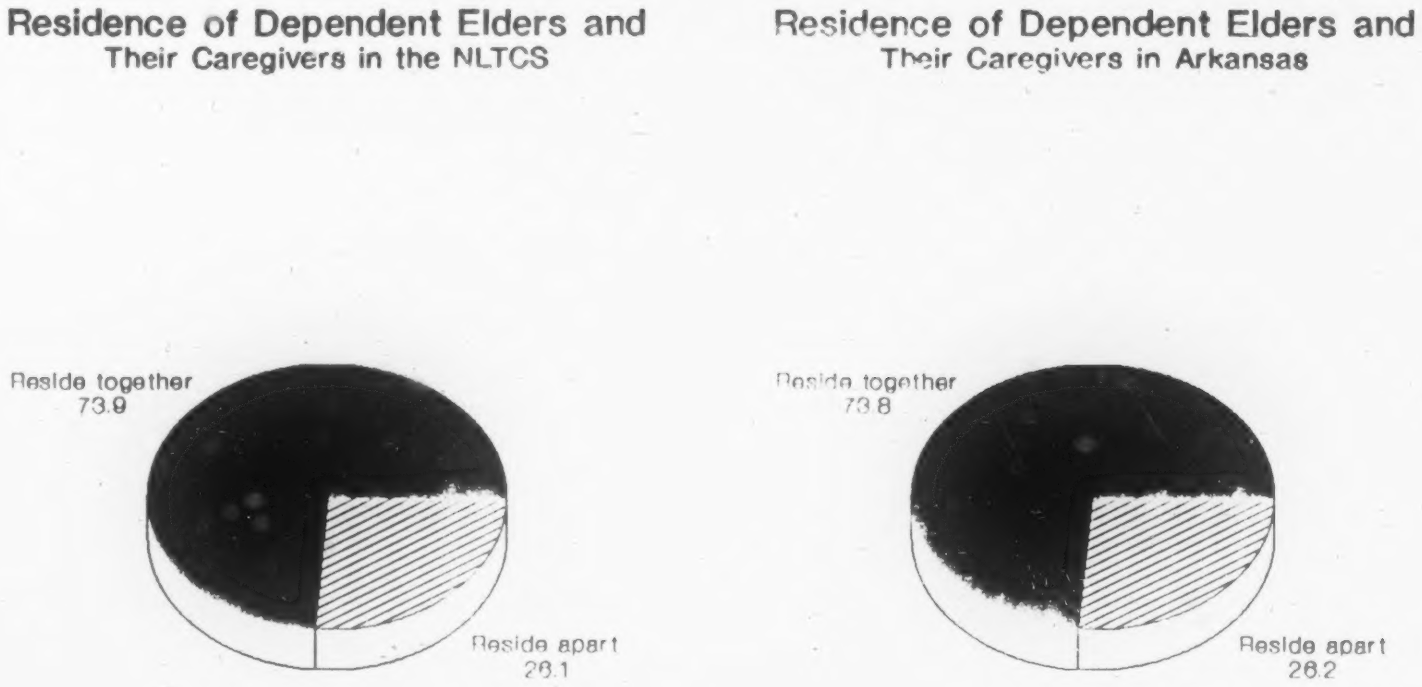
Demographic characteristics of Arkansas caregivers differ significantly by type of relationship to the dependent elder (Table 2-1). Almost 30% of the spousal caregivers are 75 or older, and an additional 44% are between 65 to 74. The vast majority of children and "other" caregivers are younger than 65 with well over half between the ages of 45 and 65 and almost two-fifths younger than 45.

Male caregivers are more likely to be spouses than children or other types, but in each category, females were performing the majority of caregiving functions. Children were less likely than "other" types of caregivers to live with their dependent elder. More than one-third of the children and other caregivers work full-time.

A majority of primary caregivers who are children are married, 56.9%. More than one-third of the primary caregivers who are in the "other" category have never married, and almost half the "other" group are non-white.

2.2 DEPENDENT ELDER CHARACTERISTICS

Exact comparison of elders in the Arkansas study and the NLTCS is not possible since the NLTCS included no elders younger than 65. In devising the ALSHA, planners and researchers were committed to the need to look at cohorts not yet eligible for aging services to predict future service demands. Access to this slightly younger cohort did identify younger, pre-retirement elders who met



Residence of Dependent Elders and Their Caregivers in the NLTCS

Residence of Dependent Elders and Their Caregivers in Arkansas

Figure 2-5

Relation of Caregiver to Elder

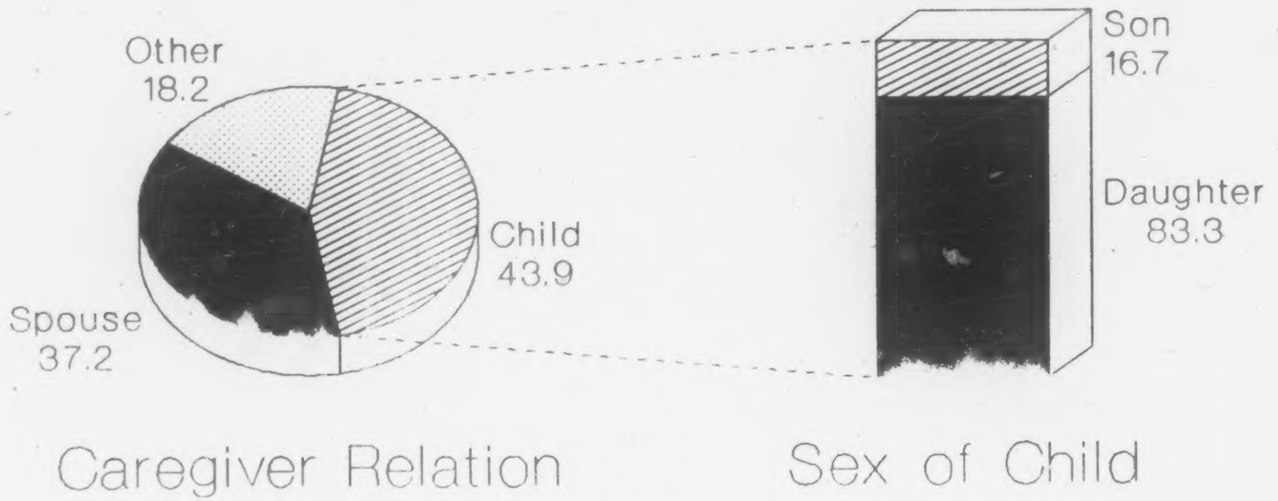


Figure 2-6

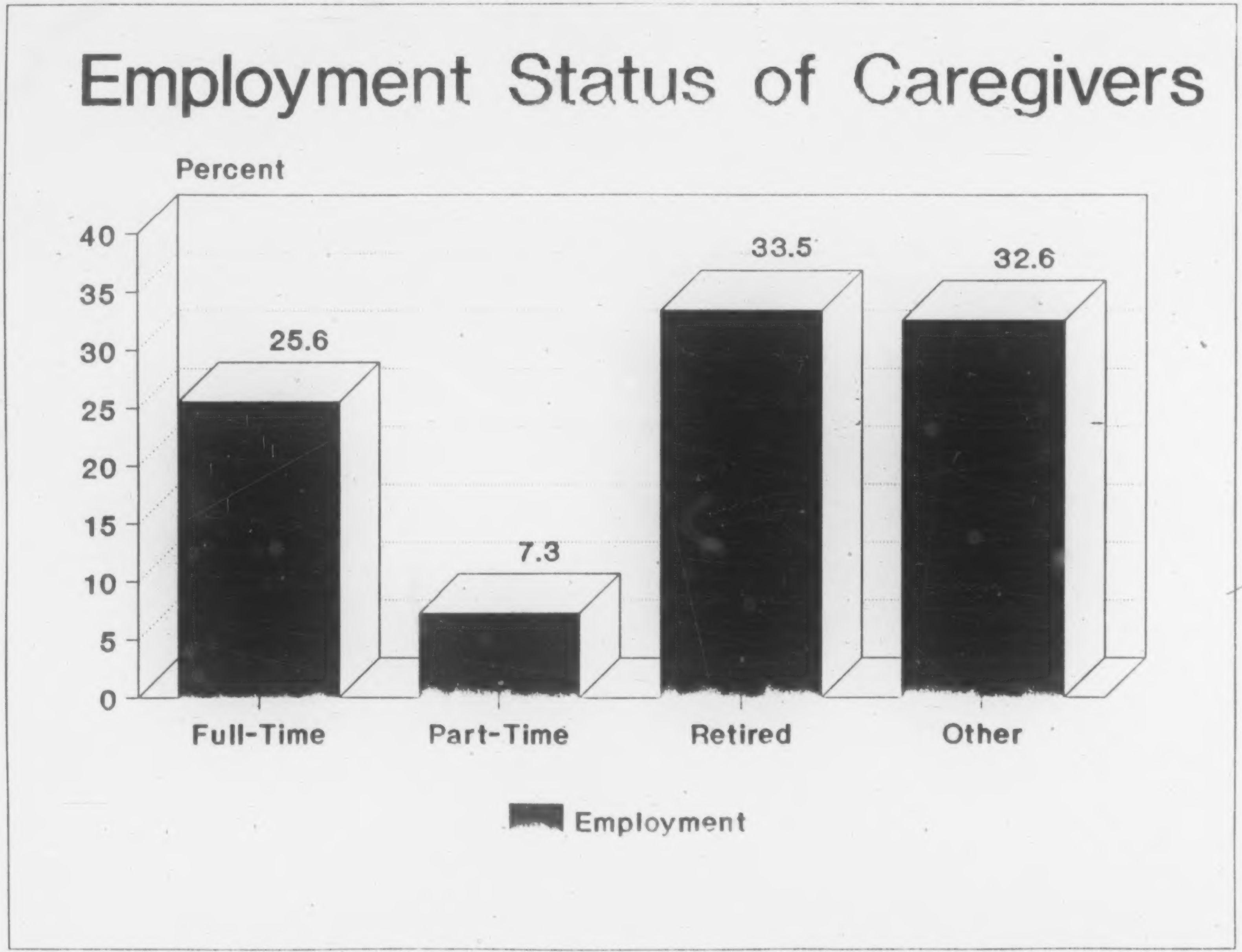

Employment Status of Caregivers
Percent
40
35
30
25
20
15
10
5
0
25.6
7.3
33.5
32.6
Full-Time
Part-Time
Retired
Other
Employment

Figure 2-7

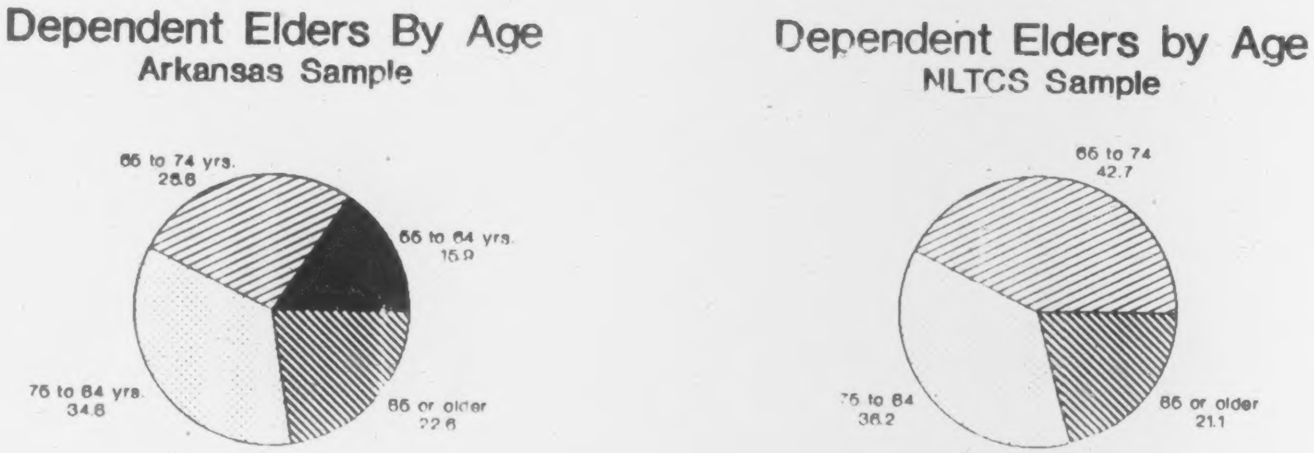
TABLE 2-1
DEMOGRAPHIC CHARACTERISTICS OF CAREGIVERS BY RELATIONSHIP TO DEPENDENT ELDER

Demographic Characteristics	Spouse	Child	Other	Significance
Age				
LT 45	0.0	37.5	38.7	.0001
45 to 64	26.2	55.6	54.8	
65 to 74	44.3	5.6	0.0	
75 or older	29.5	1.4	6.5	
Sex				
Male	37.7	15.3	12.9	.003
Female	62.3	84.7	87.1	
Caregiver Residence				
Live with Elder	100.0	54.2	67.7	.0001
Lives apart	0.0	45.8	32.8	
Caregiver Marital Status				
Never married	0.0	16.7	35.5	.0001
Married	100.0	56.9	41.9	
Other	0.0	26.4	22.6	
Employment				
Full-time	8.3	36.1	35.5	.0001
Part-time	8.3	5.6	9.7	
Retired	65.0	13.9	19.4	
Other	18.3	44.4	35.5	
Caregiver Race				
White	88.5	65.3	51.5	.0003
Non-white	11.5	34.7	48.4	
Caregiver Educational Level				
LT High School	67.2	27.8	38.7	.0002
High School	21.3	40.3	32.3	
Some College/ Graduate	11.5	31.9	29.0	
Receive Medicaid				
Yes	6.7	23.6	11.1	.02
No	93.3	76.4	88.9	

the study's definition of dependence. Almost 16% of the dependent elders are between the ages of 55 and 64; 26.8% are 65 to 74 years; 34.8% are 75 to 84 years; and 22.6% are 85 or older (Figure 2-8). Although no respondents in the NLTCS were younger than 65, the composition of the two older cohorts is very similar to that found in Arkansas. Slightly over 21% were 85 or older, and 36.2% were between 75 and 84 years.

Distribution of the sexes also was comparable with 60% of the NLTCS dependent elders female and 40% male. In Arkansas, the sample is 63.4% female and 36.6% male (Figure 2-9).

Age of Ark. and NLTCS Elders



Dependent Elders By Age
Arkansas Sample

Dependent Elders by Age
NLTCS Sample

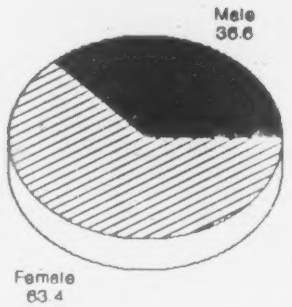
•Included no Elders 55-64 yrs.

Figure 2-8

Sex of Ark. and NLTCS Elders

Dependent Elders by Sex

Arkansas Caregiver Study



Dependent Elders by Sex

National Long Term Care Survey

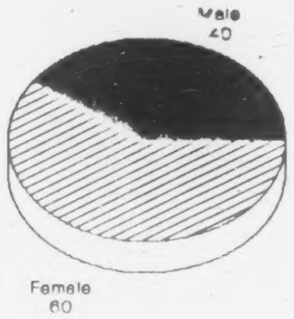


Figure 2-9

3.0 HEALTH STATUS OF DEPENDENT ELDERS

3.1 ADL/IADL Limitations

Limitations in activities of daily living (ADLs) and instrumental activities of daily living (IADLs) are generally considered to be the most reliable predictors of nursing home admissions and of utilization of other community-based services. As elders become more limited in these vital areas, they and their family members find it necessary to seek assistance to enable the elder to maintain independence in the home for as long as is feasible.

For the purposes of this study, ADL limitations are defined as difficulty feeding oneself; dressing/grooming; bathing/shampooing; toileting; problems with bowel and/or bladder accidents; and difficulty getting around without cane, crutches, wheelchair, or assistance from another person. Figure 3-1 compares the smaller, dependent sample with the general sample of more than 6,000 Arkansas elderly interviewed for the Arkansas Longitudinal Study in 1986. This dependent sample represents a substantially impaired group. More than half the dependent elders, 53%, are limited in bathing or shampooing while 51.2% are limited in their ability to walk or get around without assistance.

The ability to feed oneself is generally the last of the basic ADL functions to deteriorate. Accordingly, in this dependent sample, the lowest prevalence rate was for difficulty feeding oneself, 11.6%. When compared to the levels of difficulty experienced by the random sample of community dwelling elders, one can better appreciate the extreme level of dependence which this sample represents. In the 1986 random sample, 1% of the elders 55 or older had some level of difficulty feeding him/herself (Figure 3-1).

Examination of Figure 3-2 illustrates the extremely high level of dependence in areas of instrumental activities of daily living. In this study, IADL limitation is measured by difficulties doing yardwork or heavy cleaning; light housework; cooking; managing business affairs or balancing checkbook; shopping; self medicating; using the telephone; laundry; and difficulty getting places outside walking distance without assistance or special transportation. As was true for the random sample, more elders report difficulty doing yardwork or heavy cleaning than other chores, but among

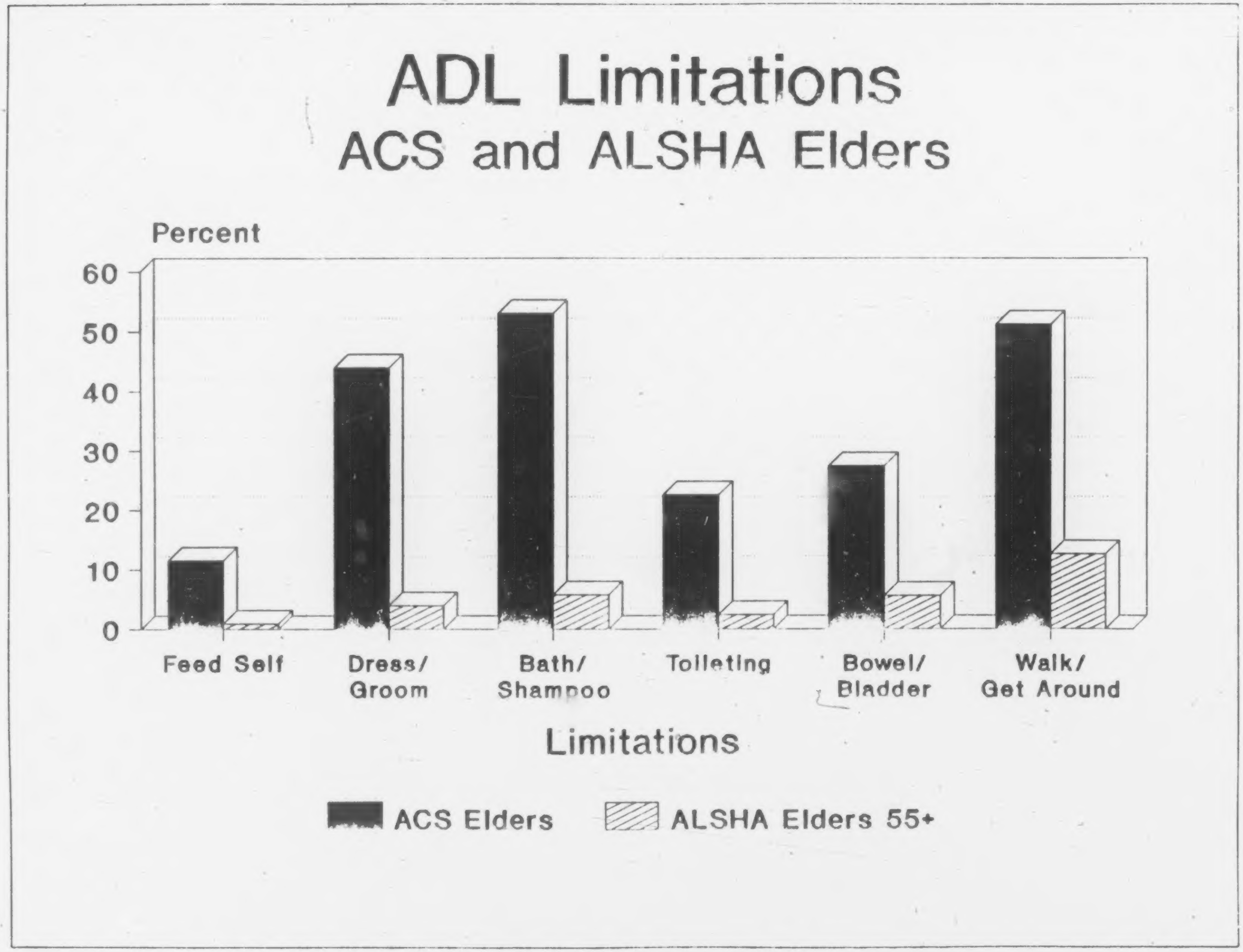

ADL Limitations
ACS and ALSHA Elders
Percent
60
50
40
30
20
10
0
Feed Self
Dress/ Groom
Bath/ Shampoo
Toileting
Bowel/ Bladder
Walk/ Get Around
Limitations
ACS Elders
ALSHA Elders 55+

Figure 3-1

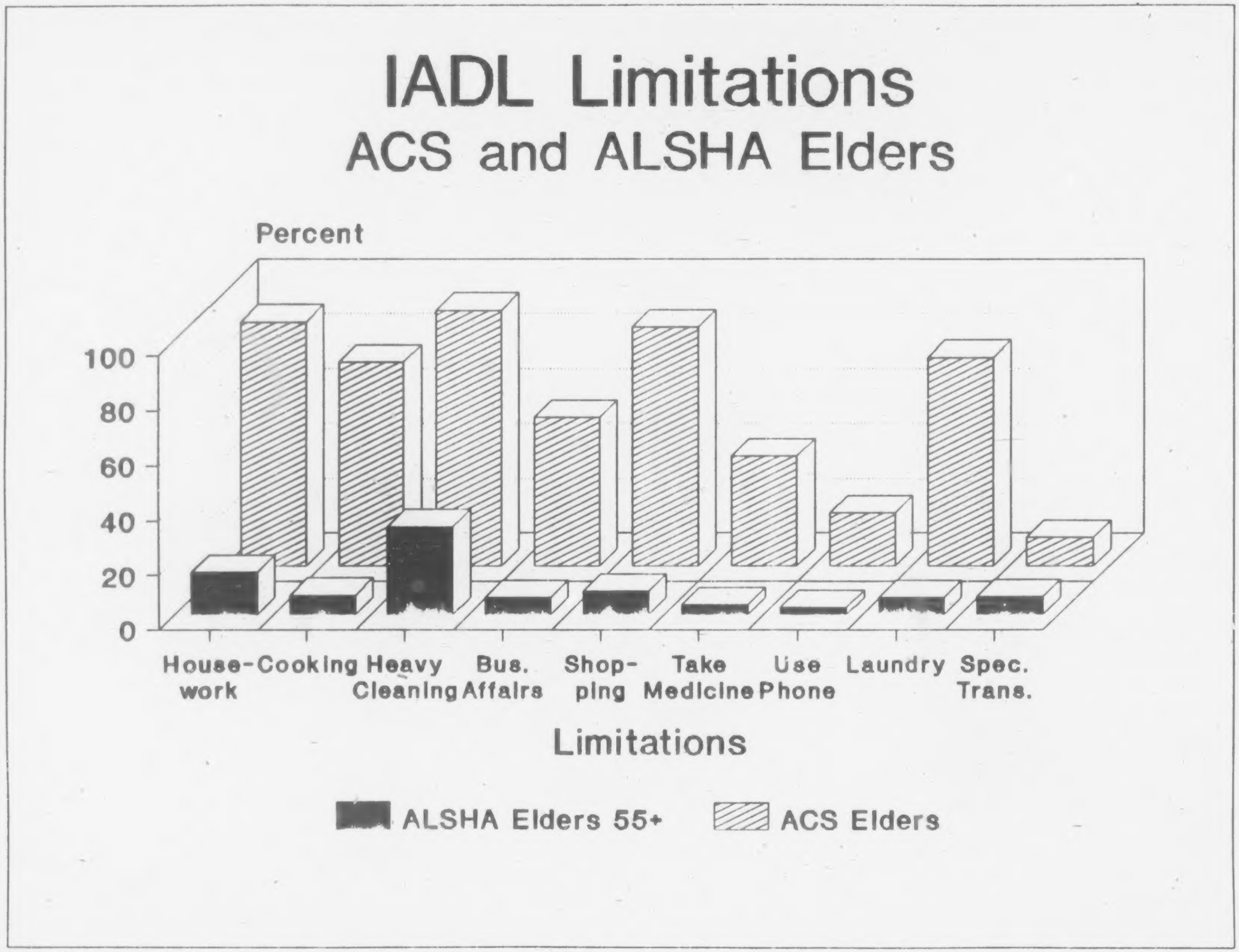

IADL Limitations
ACS and ALSHA Elders
Percent
100
80
60
40
20
0
House-work
Cooking
Heavy Cleaning
Bus. Affairs
Shop-ping
Take Medicine
Use Phone
Laundry
Spec. Trans.
Limitations
ALSHA Elders 55+
ACS Elders

Figure 3-2

the dependent sample, the prevalence rate is 93.3%, approximately three times higher than the random sample. Almost 90% have difficulties doing light housework and shopping. Approximately three-quarters have difficulties doing laundry and cooking. More than half report problems managing their own business affairs, and 40% report difficulties managing their own medication. Almost one-fifth cannot use a telephone without assistance, and approximately 10% need assistance or special transportation to get places outside walking distance.

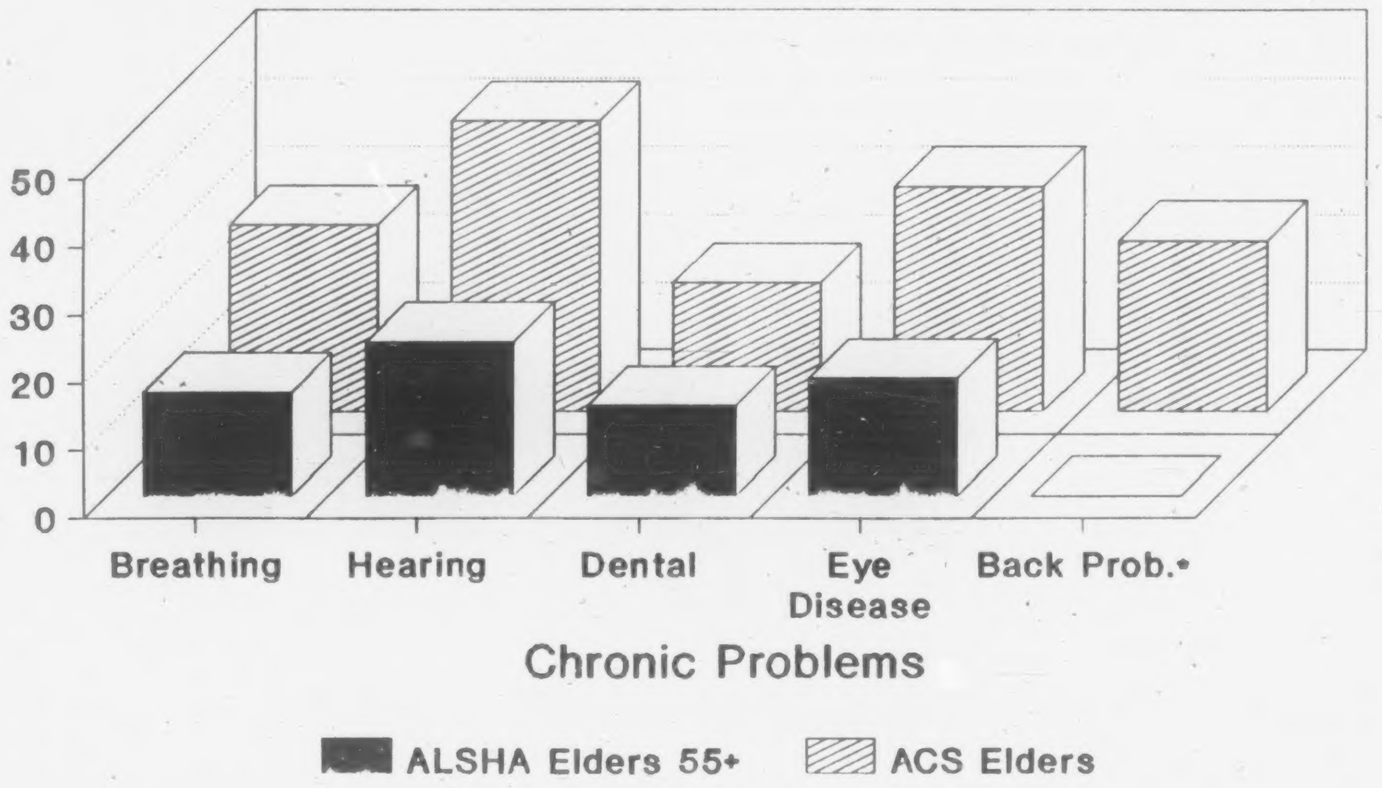
These prevalence levels demonstrated by the dependent elders in ADL and IADL limitations reflect the evaluations of health status for the elder as reported by the caregiver. Almost 70% of the dependent elders are described in fair or poor health with 40.2% described in poor health.

3.2 Chronic Health Problems

A comparison of the chronic health problems reported for the dependent elders does not differ as substantially from the random survey as is true for the presence of ADL/IADLs. Although dependent elders report more chronic health problems, the random sample of elders also identified many chronic problems. Hearing difficulties were the most frequently reported problem for the dependent elders with more than two-fifths reporting this difficulty. One-third report some type of eye disease such as glaucoma, diabetic retinopathy, etc. More than one-quarter report difficulties with breathing and back problems, and almost 20% report dental problems. The pattern is similar for the random sample, but prevalence rates range from a high of 22.8% for hearing to 13.3% for dental problems. Difficulty with back pain or problems was not asked in the baseline, ALSHA random survey (Figure 3-3).

Figure 3-4 compares five of the chronic health variables linked to mental health or cognitive functioning. Two-fifths of the dependent sample have difficulty remembering events compared to almost 14% of the random sample. More than 22% report the presence of stress, anxiety or depression as well as difficulty understanding instructions and difficulty speaking without hesitating or forgetting. This prevalence rate is substantially higher than the 1.4% reported by the random sample, **but these two figures cannot be compared because the content of the probe changed in this caregiver study from the original content which was simply "difficulty talking."** Emotional problems

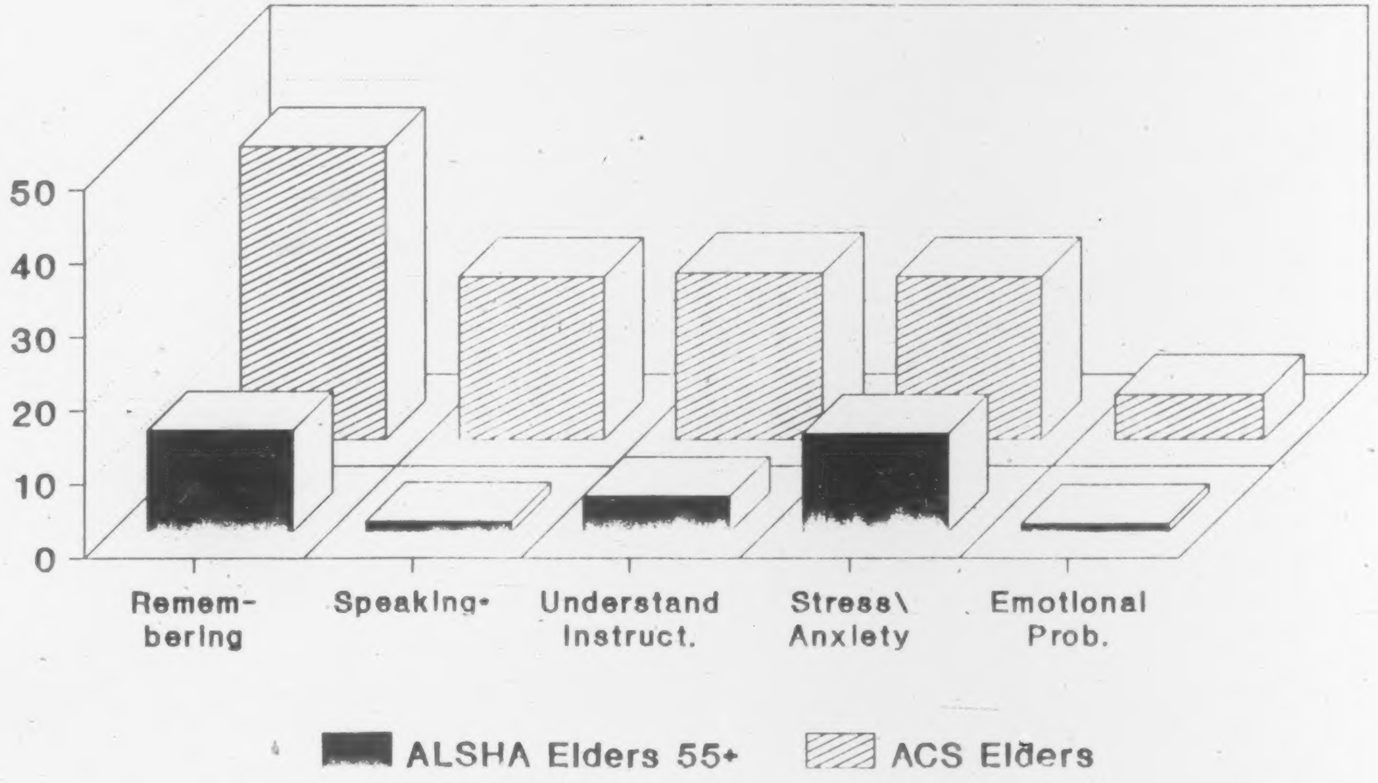
Selected Chronic Health
Problems of ACS and ALSHA Elders



Back Problems Not Asked In ALSHA Phase I

Figure 3-3

Selected Chronic Problems
ACS and ALSHA Elders



•Content of Probe Changed

Figure 3-4

are the least reported problem among this grouping for both the dependent elders and for the random sample.

Certainly, Figure 3-5 compares the presence of some of the most debilitating health problems in the dependent elder sample and the random sample from the 1986 Arkansas study. Almost 4% of the dependent sample have Alzheimer's disease, and 4.3% have Parkinson's Disease. More than 18% have suffered a stroke. More than one-fifth have hardening of the arteries, and almost half, 46.3% have hypertension. However, the presence of hypertension is also a problem in the random sample with more than one-third, 35.8% of the 55+ age group reporting this difficulty. Figure 3-6 illustrates the health problems which are generally most feared by elders and some of which most often lead to death. Problems with arthritis appears to be a major difficulty for both groups with almost three-fifths of the dependent elder sample, 58%, and 46% of the random elder group reporting this problem. Heart disease is a major problem for almost half of the dependent elders, kidney problems are reported by almost one-quarter, and diabetes by more than one-fifth. Cancer rates are higher for the dependent elder, 7.4%, but only by 2%.

Selected Chronic Health
Problems of ACS and ALSHA Elders

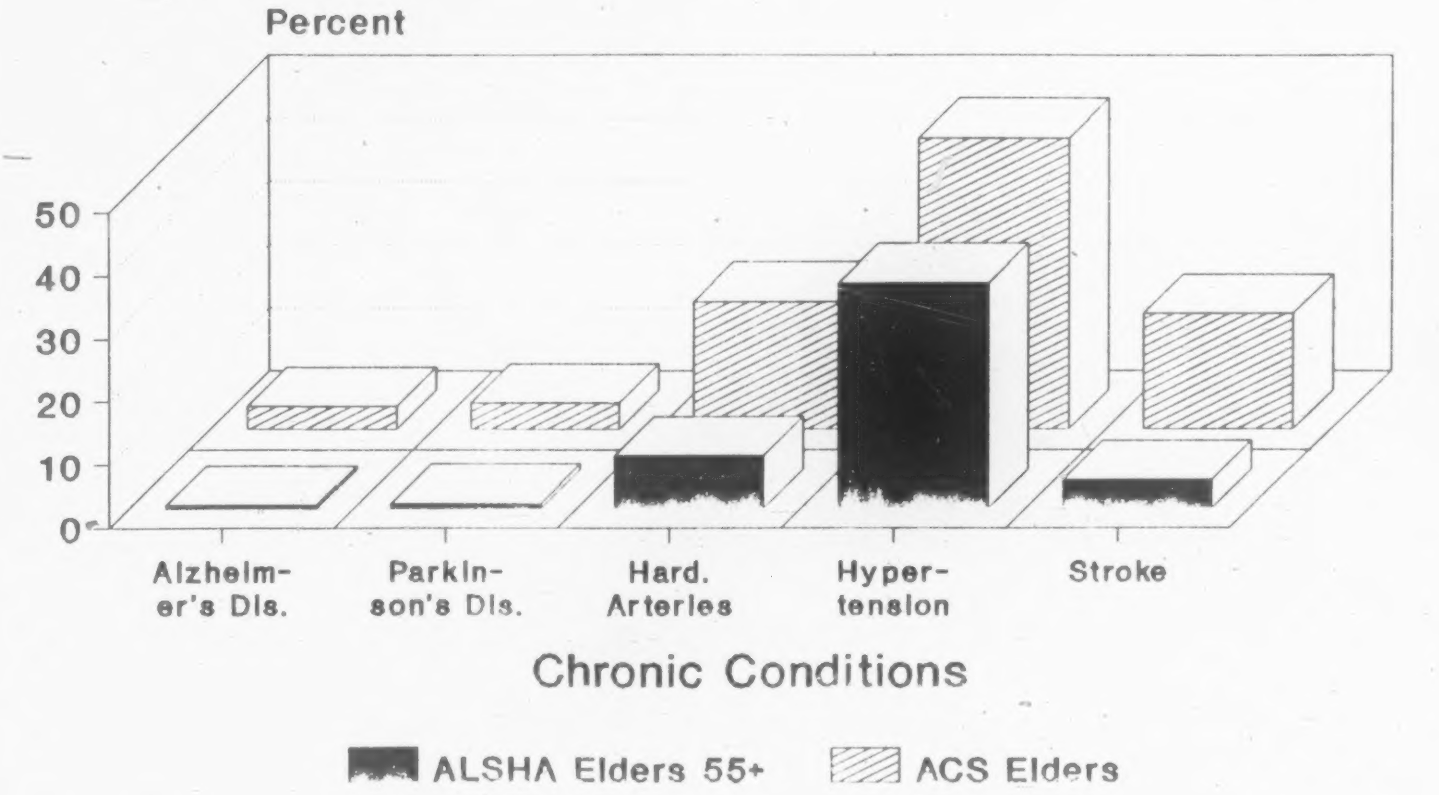
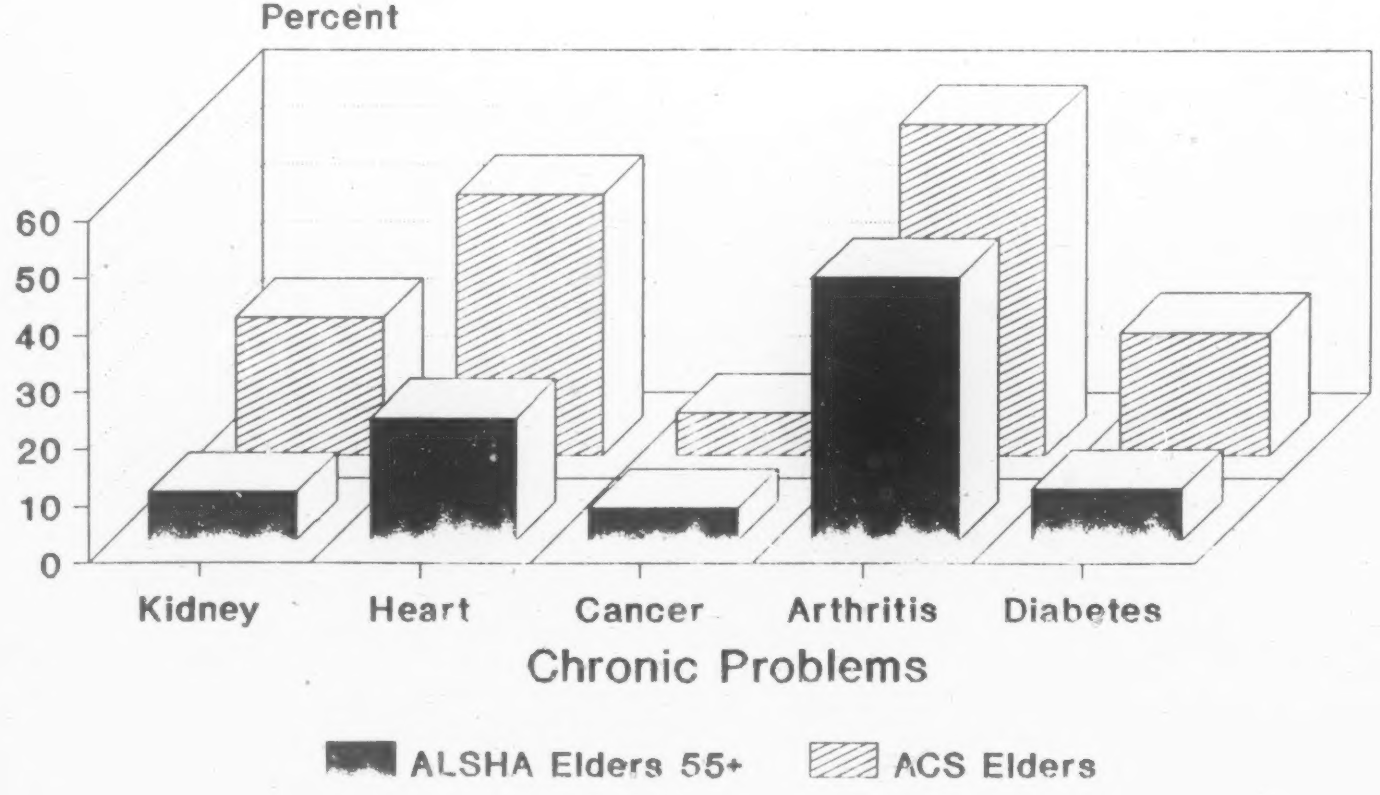


Figure 3-5



Selected Chronic Problems
ACS and ALSHA Elders

Figure 3-6

4.0 PATTERNS OF HELPING

National studies of caregiving have established that family caregivers provide most of the care to impaired elderly persons who are not in nursing homes. Informal caregivers are more likely to provide assistance with instrumental activities of daily living (IADL) than with basic ADL activities (Burwell, 1986). In a study by Branch and Jette, 86% of the elderly who received assistance in IADL activities relied solely on informal caregivers for these services. Only 3% relied solely on formal caregivers, and 11% relied on a combination of formal and informal caregivers. As elders become more functionally limited, the reliance on formal service providers increases. Among persons receiving basic ADL services, 50% relied solely on informal caregivers, 38% relied on formal service providers, and 12% relied on a combination of formal and informal sources of assistance (Branch and Jette, 1983).

These kinds of demands on informal caregivers represent not only a substantial demand in terms of actual services, but also a major investment in terms of impact on career obligations, economic consequences and relationships with other family members. This section of the report describes the pattern of helping for the ADL/IADL limitations of Arkansas elders and describes the types of assistance in addition to or in lieu of the primary caregiver sought by these dependent households.

Table 4-1 describes the prevalence levels of various ADL/IADL limitations in the dependent elder population and compares them with the prevalence levels for caregivers. In addition, the patterns of assistance both of the caregivers and by secondary helpers is described as are perceptions of additional help needed.

Highest prevalence levels for ADL limitations are noted for difficulties bathing and shampooing and in walking without assistance of a cane, crutch, wheelchair or help from another person. Both probes address difficulties in physical mobility, and more than half the dependent elders report these difficulties. Among all the ADL limitations, caregivers also report the highest prevalence rates for difficulty walking or getting around without assistance, 3.1% (Figure 4-1). However, more than three-fifths provide assistance in walking or getting around to the elder, and

TABLE 4-1

PREVALENCE OF DIFFICULTIES IN ELDERS AND CAREGIVERS AND INVOLVEMENT OF CAREGIVERS WITH ASSISTANCE

Difficulties	Elder Prevalence	Caregiver Prevalence	Caregiver Helps	Others Help	Need More Help
ADL Limitations					
Feed Self	11.6	0	94.7	2.6	1.3
Dress/Groom	43.9	0	84.7	13.9	1.9
Bath/Shampoo	53.0	0.6	75.9	20.0	3.2
Toileting	22.6	0.6	73.0	4.5	2.0
Bowel/Bladder	27.4	0.6	75.6	3.9	1.9
Walk/Get Around	51.2	3.1	61.9	13.3	0.6
IADL Limitations					
Lt. Housework	89.0	9.8	89.0	38.9	8.0
Cooking	74.4	3.1	89.3	20.6	5.0
Yardwork/Hvy. Cleaning	93.3	19.6	77.1	54.0	6.7
Bus. Affairs	54.3	0	89.0	8.1	0.6
Shopping	87.2	3.1	94.4	22.0	0.6
Take Medicine	40.2	0.6	90.8	12.1	0.6
Use Phone	19.5	0	62.5	1.3	0
Laundry	76.2	2.5	85.6	21.7	1.9
Spec. Trans.	10.4	1.2	70.6	2.0	1.3

Limitations in ADLs
Caregiver and Dependent Elders

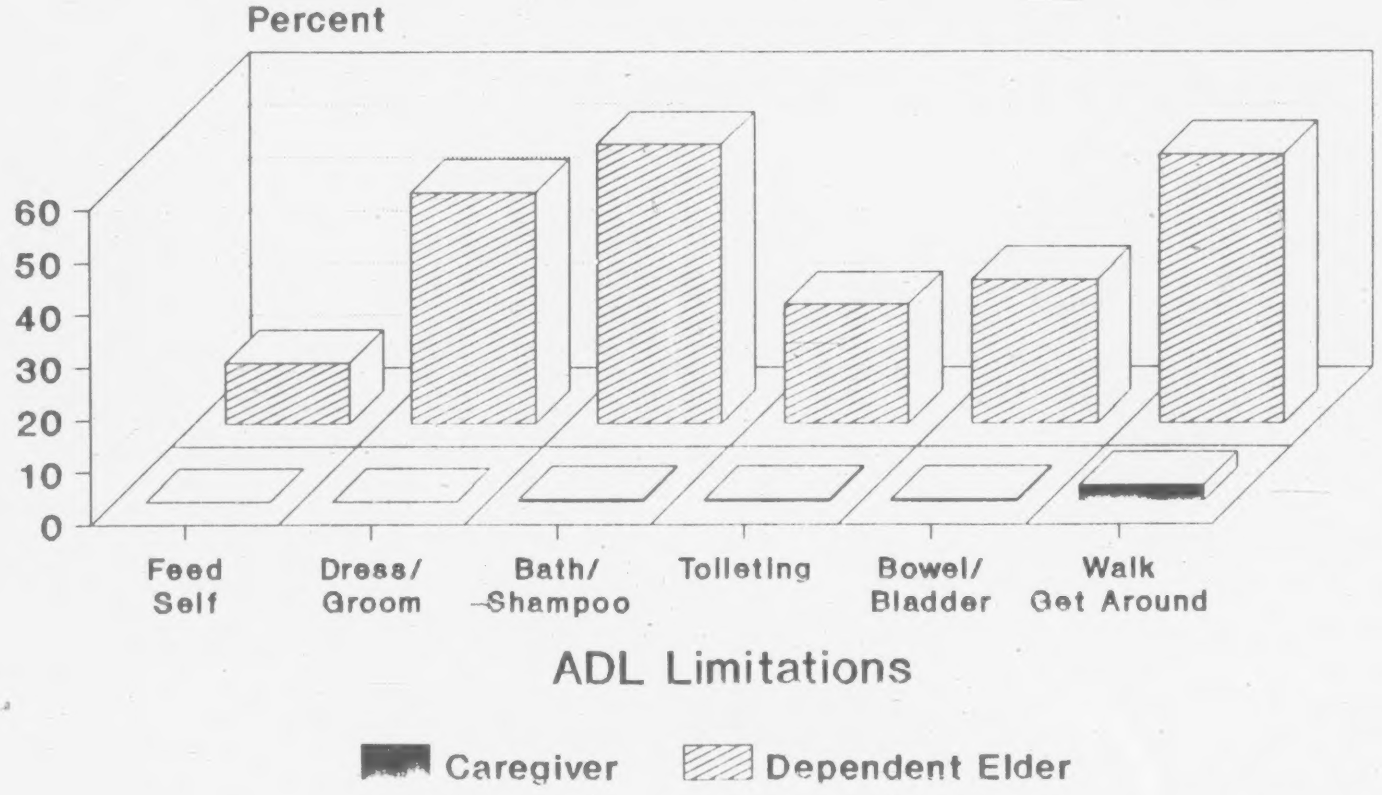


Figure 4-1

more than three-quarters provide assistance in bathing/shampooing. One-fifth of the elders receive help from a source other than the primary caregiver for bathing/shampooing, and 3.2% of the caregivers indicate that more help is needed. For difficulties walking/getting around, 13.3% of the elders receive help from someone in addition to or other than the primary caregiver.

More than two-fifths of the dependent elders, 43.9%, have difficulties with dressing/grooming. None of the caregivers report this difficulty. Almost 65% assist the elder with this function, and 13.9% of the elders receive help from someone other than the primary caregiver. Almost 2% indicate more help is needed. More than one-fifth of the elders have difficulty transferring to the toilet, and more than one-quarter have problems with bowel and bladder accidents. Less than 1% of the caregivers report these difficulties. Almost three-quarters of the caregivers do assist the elder with these problems, and, in both cases, less than 5% receive assistance from a different or additional source. Again, 2% or less report a need for additional assistance.

Difficulties feeding him/herself are reported for just under 12% of the dependent elders. None of the caregivers report this difficulty, and almost 95% provide assistance to the elder. Just under 3% receive additional help, and more than 1% report a need for more help.

These perceptions of unmet need are lower than those identified by the GAO in an analysis of the National Long Term Care Survey data. In that study, GAO estimated that 5% of the elderly who have functional impairments and are assisted by a caregiver need more assistance. For each of these difficulties, Arkansas caregivers report lower needs for additional help.

The differences in perception of additional needs in the area of IADLs is even greater when comparing Arkansas caregivers to the national estimates provided by GAO from the NLTCS. From that national sample, GAO projected that 36% of the dependent elders had unmet needs for IADL assistance. For the IADL measures in Arkansas, the figures are much lower for each IADL.

For the dependent elders, the cluster of IADL difficulties providing the most problems follows the pattern established in other studies. Difficulties with heavy cleaning and yardwork is reported by 93% of the elders and almost 20% of the primary caregivers (Figure 4-2). Difficulties with light housekeeping and normal chores are reported by 89% of the elders, and problems shopping

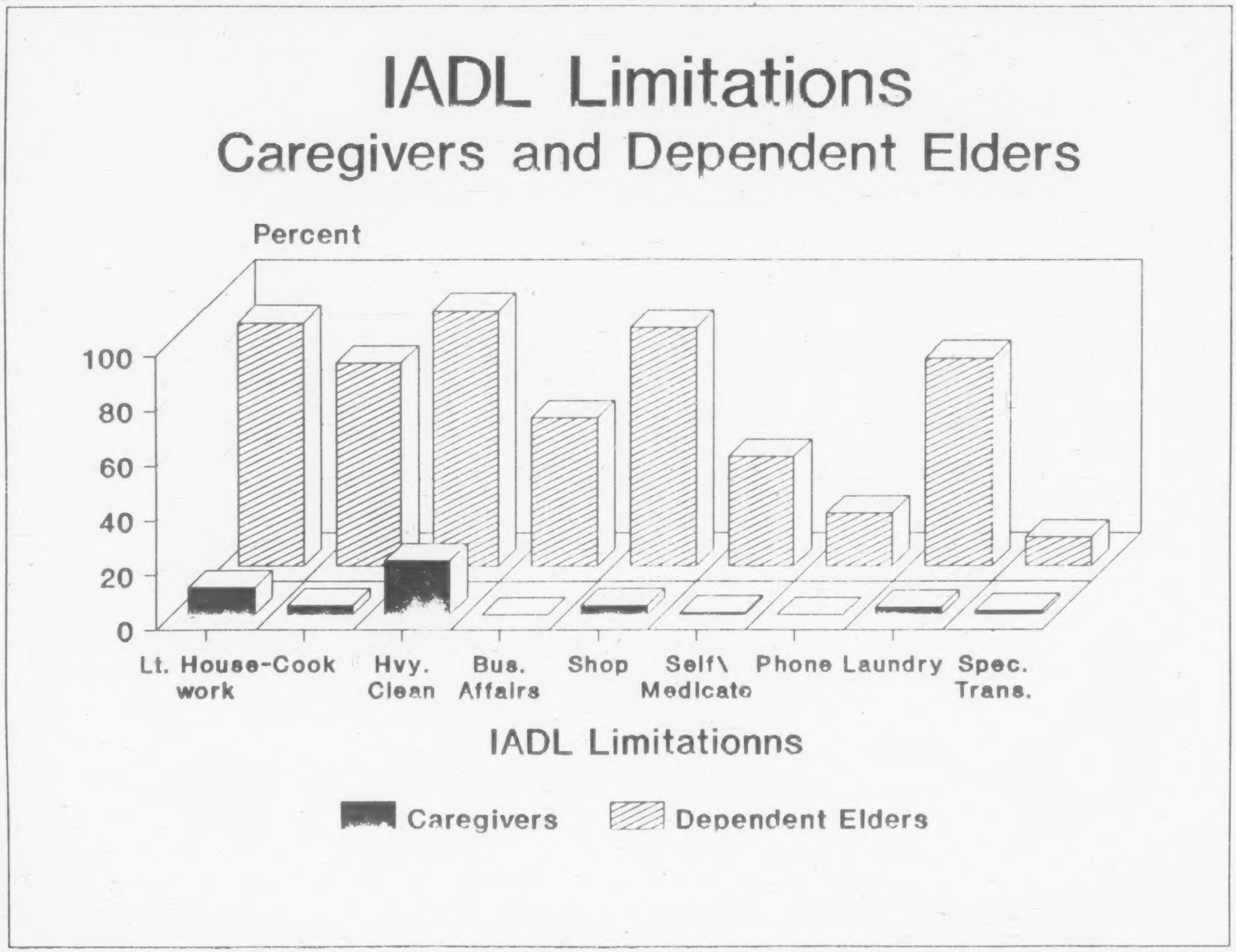

IADL Limitations
Caregivers and Dependent Elders
Percent
100
80
60
40
20
0
Lt. House-work
Cook
Hvy. Clean
Bus. Affairs
Shop
Self\ Medicate
Phone
Laundry
Spec. Trans.
IADL Limitationns
Caregivers
Dependent Elders

Figure 4-2

are reported by more than 87%. Almost 10% of the caregivers report problems with light housekeeping, and more than 3% are limited in their shopping activities. For these three problems, reliance on outside or additional help is greatest for heavy cleaning or yard work with more than half, 54%, reporting additional sources of help. Almost two-fifths report additional sources of help for light housework, and 22% use additional assistance for shopping. The highest level of unmet need for any IADL, 8%, is reported for problems with light housework, and almost 7% report additional needs for heavy cleaning chore assistance. Less than 1% report need for additional shopping assistance.

Difficulties with laundry and cooking chores are reported by approximately three-quarters of the dependent elders and a corresponding 2-3% of the caregivers. Almost 90% of the caregivers provide assistance in cooking, and 86% provide assistance with the laundry. For both chores, more than one-fifth access outside or additional sources of help, and 5% indicate more help is needed for cooking chores. Less than 2% report need for additional assistance with laundry.

More than half the dependent elders have difficulties managing their business affairs or have difficulty balancing a check book. None of the caregivers report this problem, and 89% provide assistance to the elder. More than 8% have other or additional assistance, and less than 1% report a need for more help.

Two-fifths of the elders have difficulties with managing their medications, and more than 90% of the caregivers provide assistance. Less than 1% report this difficulty themselves. Twelve percent receive assistance from a source in addition to or in lieu of the primary caregiver, and less than 1% report a need for more help.

The lowest prevalence rates in this group of problems are noted for problems using a telephone and difficulty getting places outside of walking distance without help or special transportation. Almost 20% have difficulty using the telephone, and more than three-fifths of the caregivers assist the elder with this problem. Less than 2% report additional sources of help, and no unmet needs are described. More than 10% report difficulties getting places outside walking distance without special transportation, and 70.6% of the caregivers assist with this problem. Two percent report additional sources, and less than 2% report additional help is needed.

When additional help is sought beyond that provided by the primary caregiver, the source is more likely to be formal for ADL difficulties than is true for IADL problems. Although in actual percentages, utilization of assistance in addition to that provided by the primary caregiver is relatively low, when help is sought, the formal sector is accessed for ADL problems. Table 4-2 summarizes the relationship of the additional caregiver to the dependent elder. For toileting and bowel and bladder accidents, more than half of all additional help is provided formally. For dressing/grooming, bathing/shampooing and assistance walking, getting around, at least two-fifths of the additional sources are from the formal sector.

Although actual utilization of additional help is higher for IADL difficulties than for ADLs, the reliance on the formal sector is somewhat less pronounced for these problems. The heaviest reliance on formal sources is demonstrated for assistance in managing medication, 42.1% of the group using additional services. Approximately two-fifths access formal sources for problems with light housework, yardwork/heavy cleaning, and laundry. More than one-quarter receive formal assistance for cooking, and less than 11% access the formal sector for shopping assistance. No formal assistance is provided for problems with personal business affairs, use of telephone or special transportation. For the business affairs and telephone assistance, children provide more additional services, and for special transportation, most additional assistance is provided by a relative other than spouse or child or by a friend.

TABLE 4-2
PROVISION OF SERVICES BY INDIVIDUALS OTHER THAN THE PRIMARY CAREGIVER BY TYPE OF RELATION

Limitation	Uses	Additional Helper			
	Additional Help	Spouse	Child	Other	Formal
ADL Limitation					
Dress/Groom	13.9	17.4	26.1	13.0	43.5
Bath/Shampoo	20.0	12.5	15.6	28.1	43.8
Toileting	4.5	28.6	14.3	0	57.1
Bowel/Bladder	3.9	33.3	0	16.7	50.0
Get Around	13.3	10.0	20.0	30.0	40.0
IADL Limitation					
Lt. Housework	38.9	4.8	23.8	31.7	39.7
Cooking	20.6	18.2	15.2	39.4	27.3
Yardwork/Hvy. Cleaning	54.0	3.5	30.2	26.7	39.5
Business Aff.	8.1	23.1	69.2	7.7	0
Shopping	22.0	8.1	51.4	29.7	10.8
Take Medicine	12.1	10.5	31.6	15.8	42.1
Use Phone	1.3	0	100.0	0	0
Laundry	21.7	8.3	22.2	30.6	38.9
Spec. Trans.	2.0	0	33.3	66.7	0

5.0 CAREGIVERS' HEALTH

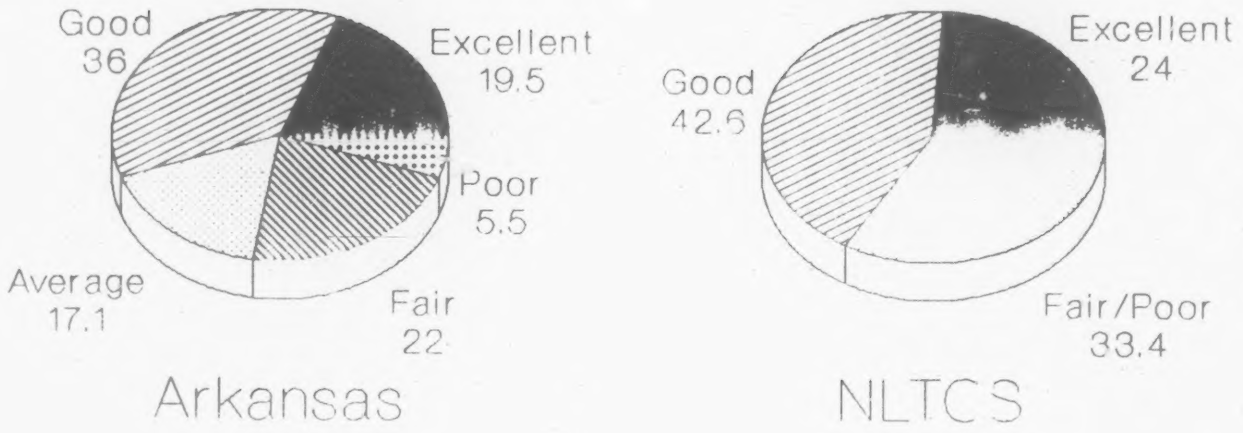
With caregivers providing the bulk of support services for dependent elders, a focus on their health status and needs becomes appropriate. An examination of the caregiver characteristics presented in Section 2.0 indicates the advanced age of some of the primary caregivers and the possibility of their own physical vulnerability.

Almost one-fifth of the caregivers in this study describe their own health status as excellent and more than one-third as good. More than one-quarter report fair or poor health, and the remaining 17% report average health. Findings from the NLTCS from all caregivers (both primary and secondary) are reported on a three point scale rather than 5 points (Figure 5-1). Almost a quarter of that group report excellent health, 43% describe their health as good, and 33.4% describe their health as fair or poor (Stone, Cafferata, and Sangl, 1987).

When perceptions of caregiver health are compared for seven demographic characteristics, four are found to be significantly different. Age of caregiver is significantly related to self-reported health status. Youngest caregivers, those younger than 45 years of age, report the most positive perceptions of their own health, as would be expected. Increasingly poor perceptions of health are not linear, however. The age group with the most negative health evaluations are the 65 to 74 year old caregivers with their ratings of poor health almost double that of the 75 or older caregivers (Figure 5-2). Male caregivers are also substantially more likely to report poor health than female caregivers (Figure 5-3). Advanced education was positively related to perceptions of health with almost half those caregivers with some college education reporting excellent health while 4.1% of the individuals with less than a high school education report excellent health status (Figure 5-4). Caregivers who had never married report substantially more positive health perceptions than do either married caregivers or caregivers who are either separated, divorced or widowed (Figure 5-5). No significant differences are noted for race, employment status, or residing with the dependent elder.

Although prevalence rates for the various ADL/IADL difficulties reported in Figures 4-1 and 4-2 in Section 4.0 are relatively low, patterns of accessing help for the caregiver are of interest. No statistical tests were performed due to the small number of individuals with these difficulties.

Self Reported Health Status of ACS and NLTCS Caregivers



NLTCS contained only 3 categories

Figure 5-1

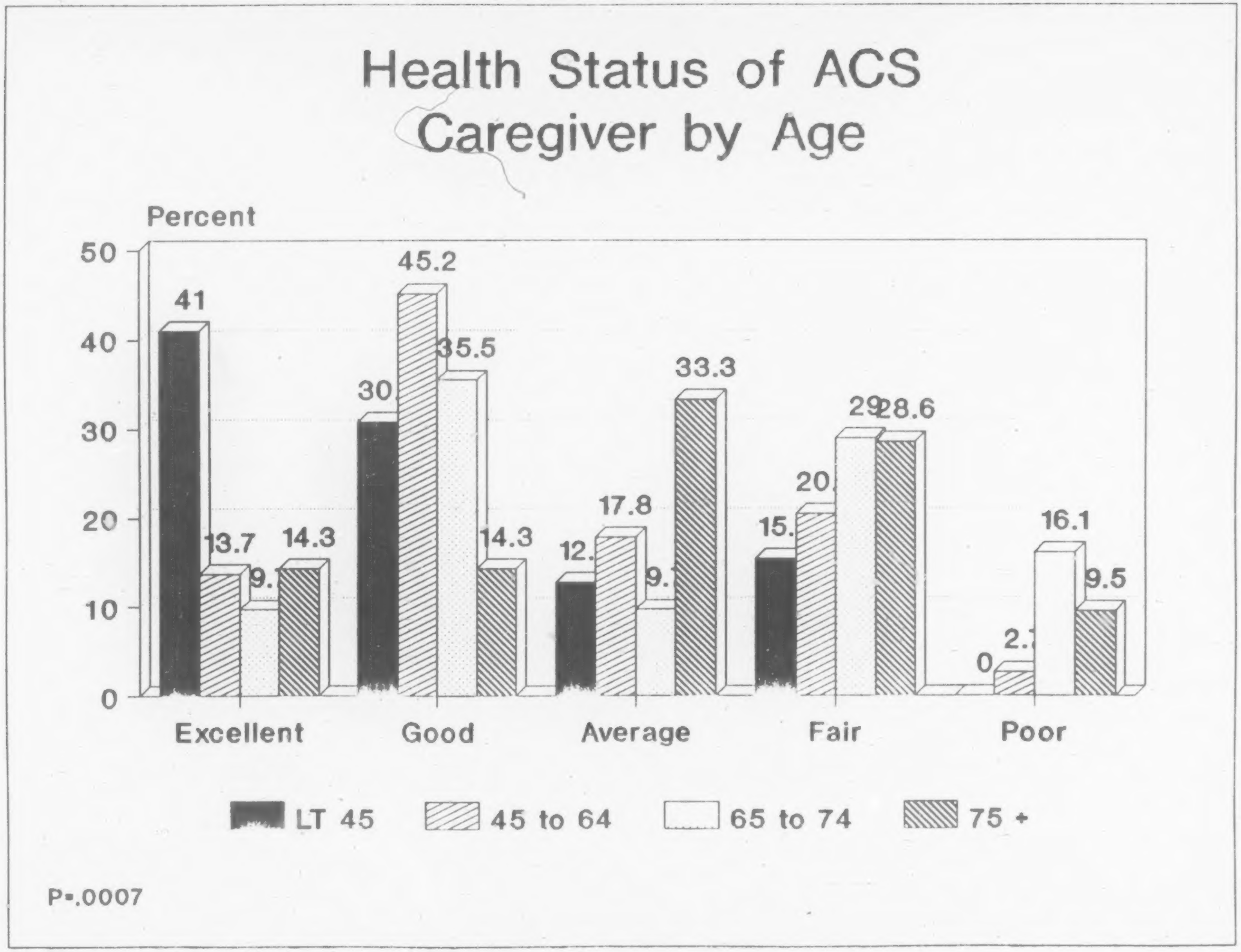

Health Status of ACS
Caregiver by Age
Percent
50
40
30
20
10
0
41
13.7
9.
14.3
30
45.2
35.5
14.3
12.
17.8
9.
33.3
15.
20.
29
28.6
0
2.
16.1
9.5
Excellent
Good
Average
Fair
Poor
LT 45
45 to 64
65 to 74
75 +
P=.0007

Figure 5-2

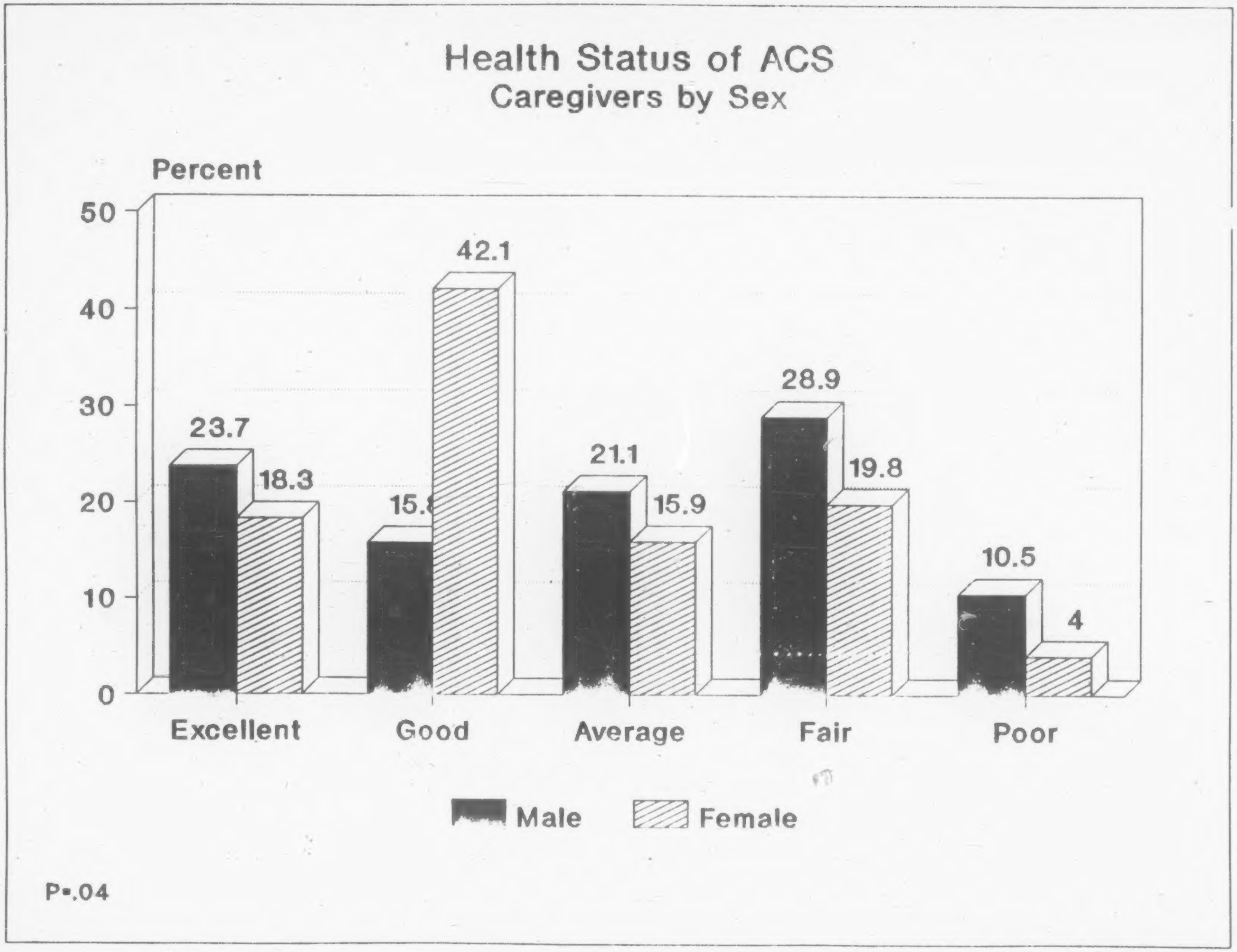

Health Status of ACS
Caregivers by Sex
Percent
50
40
30
20
10
0
23.7
18.3
15.8
42.1
21.1
15.9
28.9
19.8
10.5
4
Excellent
Good
Average
Fair
Poor
Male
Female
P=.04

Figure 5-3

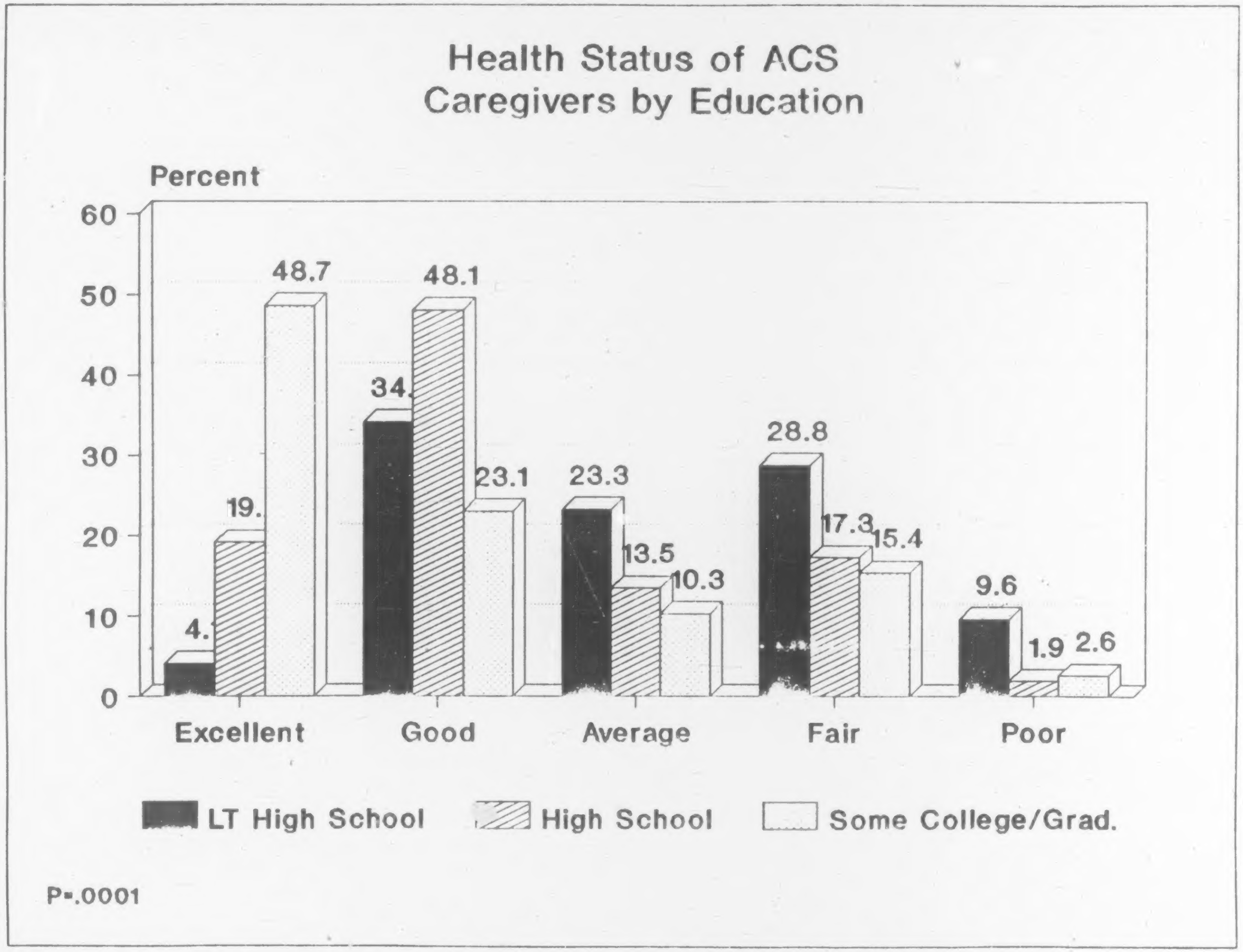

Health Status of ACS
Caregivers by Education
Percent
60
50
40
30
20
10
0
4.
19.
48.7
34.
48.1
23.1
23.3
13.5
10.3
28.8
17.3
15.4
9.6
1.9
2.6
Excellent
Good
Average
Fair
Poor
LT High School
High School
Some College/Grad.
P=.0001

Figure 5-4

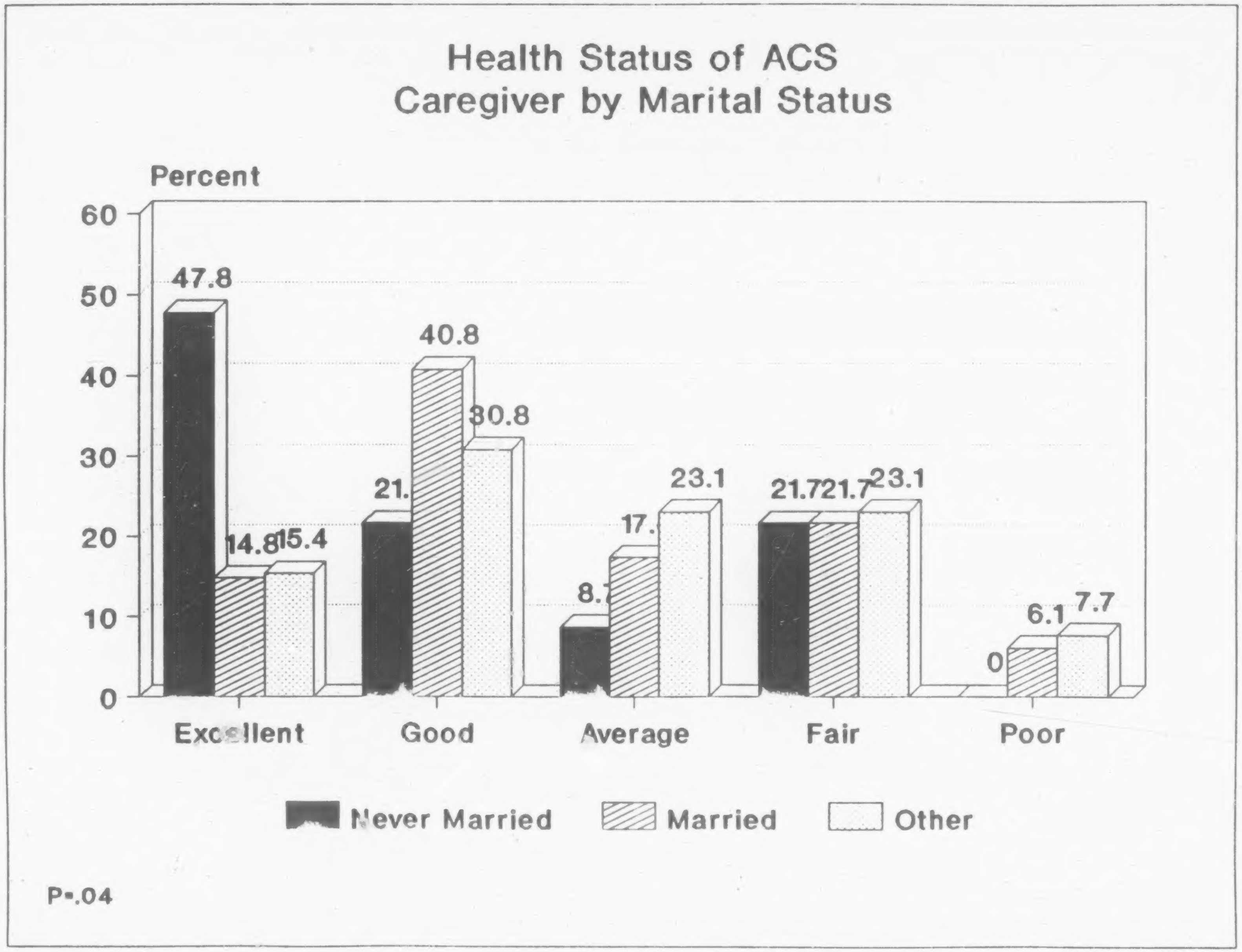

Health Status of ACS
Caregiver by Marital Status
Percent
60
50
40
30
20
10
0
47.8
14.8
15.4
21.
40.8
30.8
8.7
17.
23.1
21.7
21.7
23.1
0
6.1
7.7
Excellent
Good
Average
Fair
Poor
Never Married
Married
Other
P=.04

Figure 5-5

However, for the caregivers with ADL limitations, no help is provided for any of the caregivers. For difficulties with IADLs, caregivers' children most often provide help for shopping, laundry, heavy cleaning and yard work, and special transportation problems. Formal services are more likely to be accessed for difficulties with light housework and cooking (Table 5-1).

Although ADL/IADL limitations are relatively low among the caregivers in this study, the presence of chronic health problems is quite apparent. In Figures 5-6 - 5-9, prevalence rates of chronic health problems for caregivers are presented along with prevalence rates of problems for the dependent elders. While problems with breathing, hearing and with eye disease are substantially higher among the dependent elders than the caregivers, dental problems are not substantively different, and problems with back pain are almost identical. More than 8% of the caregivers have difficulty remembering, and more than 11% report stress, anxiety or depression. Almost one-third experience hypertension problems, and more than one-third report problems with arthritis.

Certain measures of depression/mental health were asked only for the caregivers and are presented in Figure 5-10. More than one-fifth report feelings of depression, almost 18% report difficulty falling or staying asleep, 13% report that they feel like crying, more than 6% experience poor appetite, and more than 3% report feelings of fear. Each of these variables has been linked to measures of depression.

Sex of caregiver is related to the presence of chronic problems for three of the 20 chronic health probes. Difficulties with breathing, hearing, and with eye diseases are significantly higher among male caregivers than among females. Differences in prevalence rates for cancer approach significance, .09, with males experiencing the higher levels of problems.

Age impacts seven of the 20 chronic conditions. For difficulties with hearing, eye disease, and heart problems, prevalence rates are positively related to increasing age, and the pattern is linear. However, with difficulties with hypertension, cancer, arthritis, and back problems, caregivers between the ages of 65 and 74 report the highest prevalence rates with decreasing rates for the oldest caregivers. Differences approach the level of statistical significance for problems with hardening of

TABLE 5-1

SOURCES OF HELP FOR CAREGIVERS WITH ADL/IADL DIFFICULTIES

Limitations	Prevalence	No Help	Informal	Formal	Combination
ADLs					
Feeding self	0	0	0	0	0
Dress/groom	0	0	0	0	0
Bath/shampoo	0.6	100.0	0	0	0
Toileting	0.6	100.0	0	0	0
Bowel/bladder	0.6	100.0	0	0	0
Assistance walk/ Get around	3.1	100.0	0	0	0
IADLs					
Light housework	9.8	31.3	31.3	37.5	0
Cooking	3.1	16.7	33.3	50.0	0
Yardwork/heavy cleaning	19.6	15.6	46.9	37.5	0
Business affairs	0	0	0	0	0
Shopping	3.1	0	80.0	20.0	0
Taking medication	0.6	100.0	0	0	0
Phone	0	0	0	0	0
Laundry	2.5	0	75.0	25.0	0
Spec. Transp.	1.2	33.3	66.7	0	0

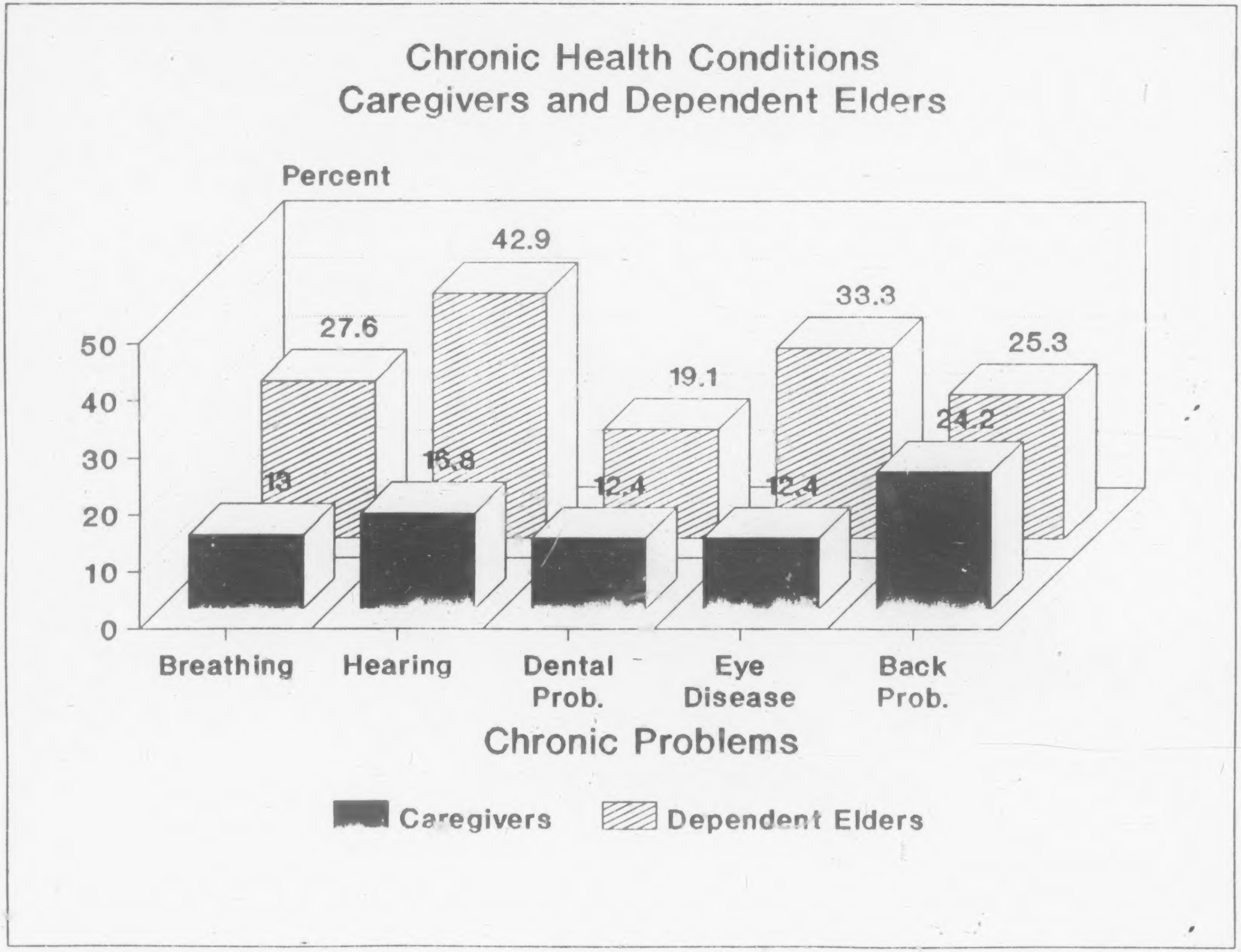

Chronic Health Conditions
Caregivers and Dependent Elders
Percent
50
40
30
20
10
0
27.6
42.9
19.1
33.3
25.3
13
16.8
12.4
12.4
24.2
Breathing
Hearing
Dental Prob.
Eye Disease
Back Prob.
Chronic Problems
Caregivers
Dependent Elders

Figure 5-6

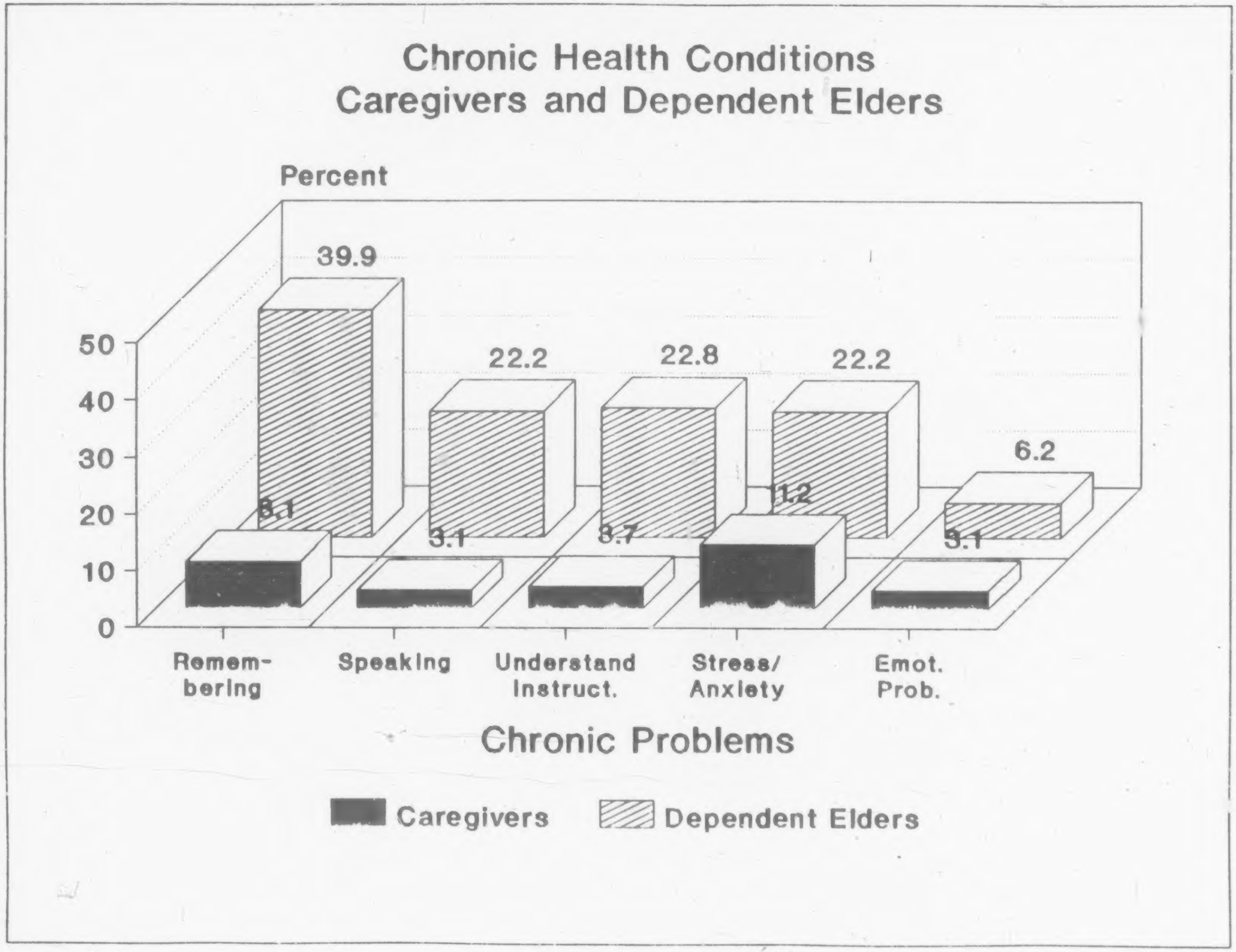

Chronic Health Conditions
Caregivers and Dependent Elders
Percent
50
40
30
20
10
0
39.9
22.2
22.8
22.2
6.2
8.1
3.1
3.7
11.2
3.1
Remem-bering
Speaking
Understand Instruct.
Stress/ Anxiety
Emot. Prob.
Chronic Problems
Caregivers
Dependent Elders

Figure 5-7

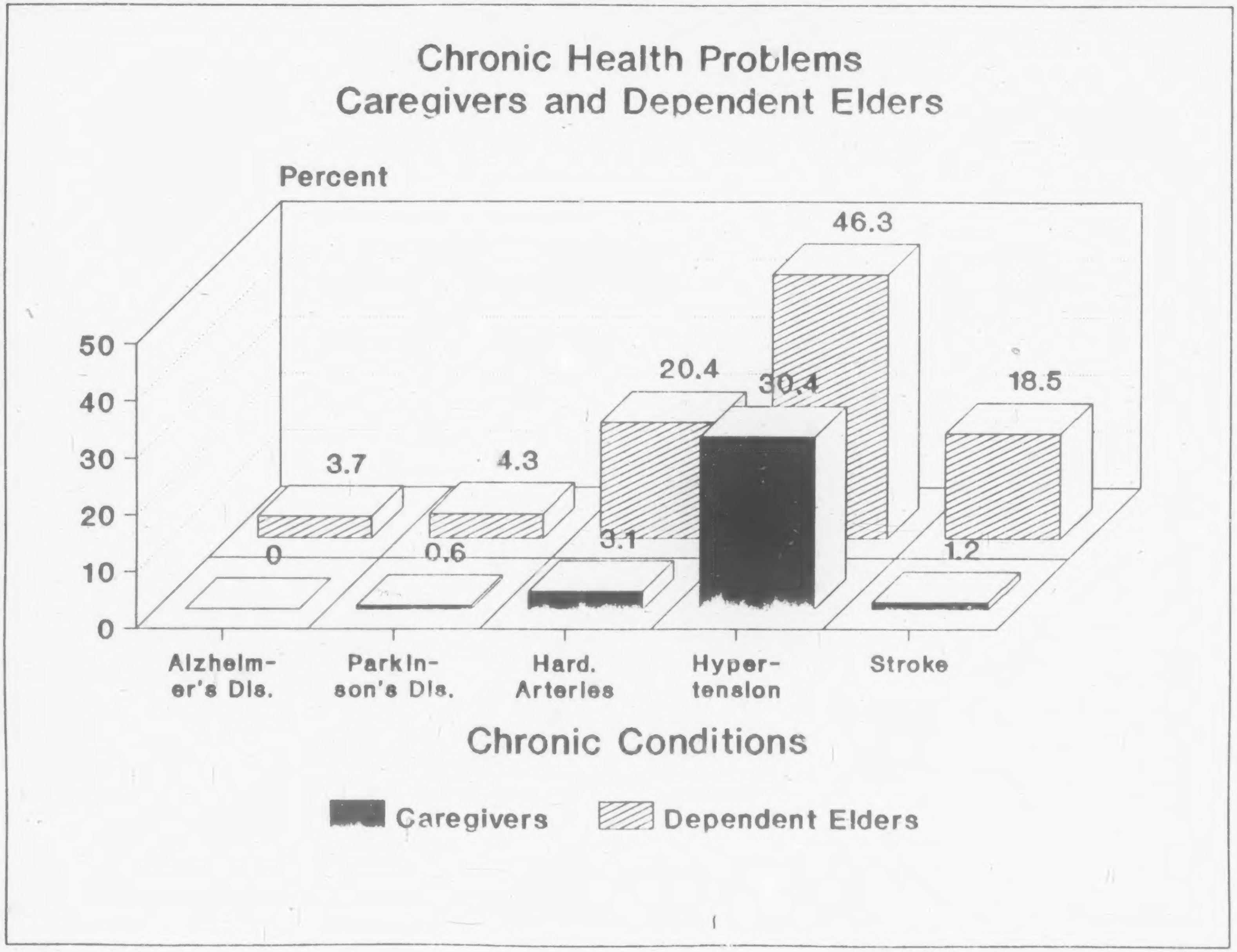

Chronic Health Problems
Caregivers and Dependent Elders
Percent
50
40
30
20
10
0
3.7
4.3
20.4
46.3
18.5
0
0.6
3.1
30.4
1.2
Alzheimer's Dis.
Parkinson's Dis.
Hard. Arteries
Hypertension
Stroke
Chronic Conditions
Caregivers
Dependent Elders

Figure 5-8

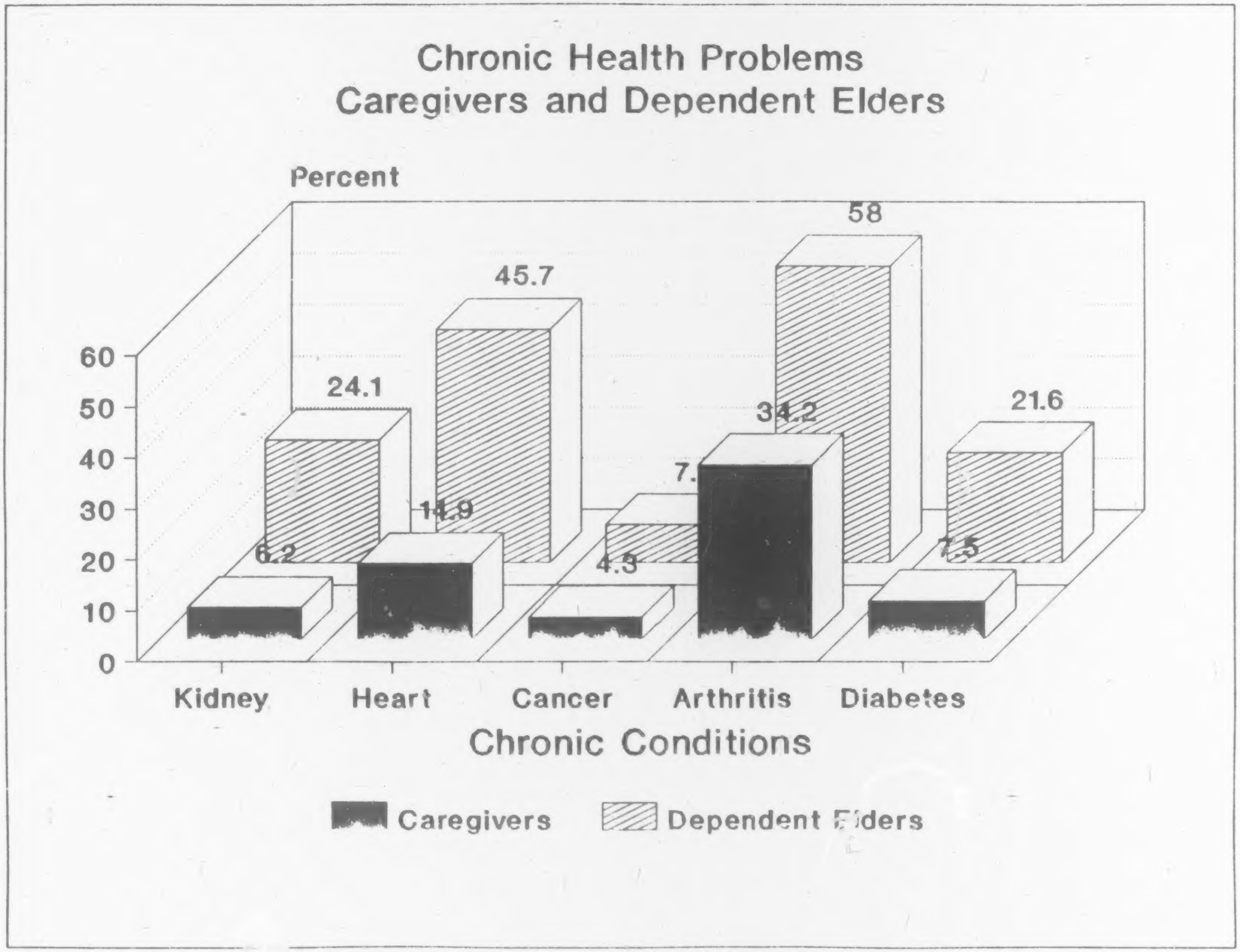

Chronic Health Problems
Caregivers and Dependent Elders
Percent
60
50
40
30
20
10
0
24.1
45.7
7.
58
21.6
6.2
14.9
4.3
34.2
7.5
Kidney
Heart
Cancer
Arthritis
Diabetes
Chronic Conditions
Caregivers
Dependent Elders

Figure 5-9

Caregiver Depression:
Related Difficulties

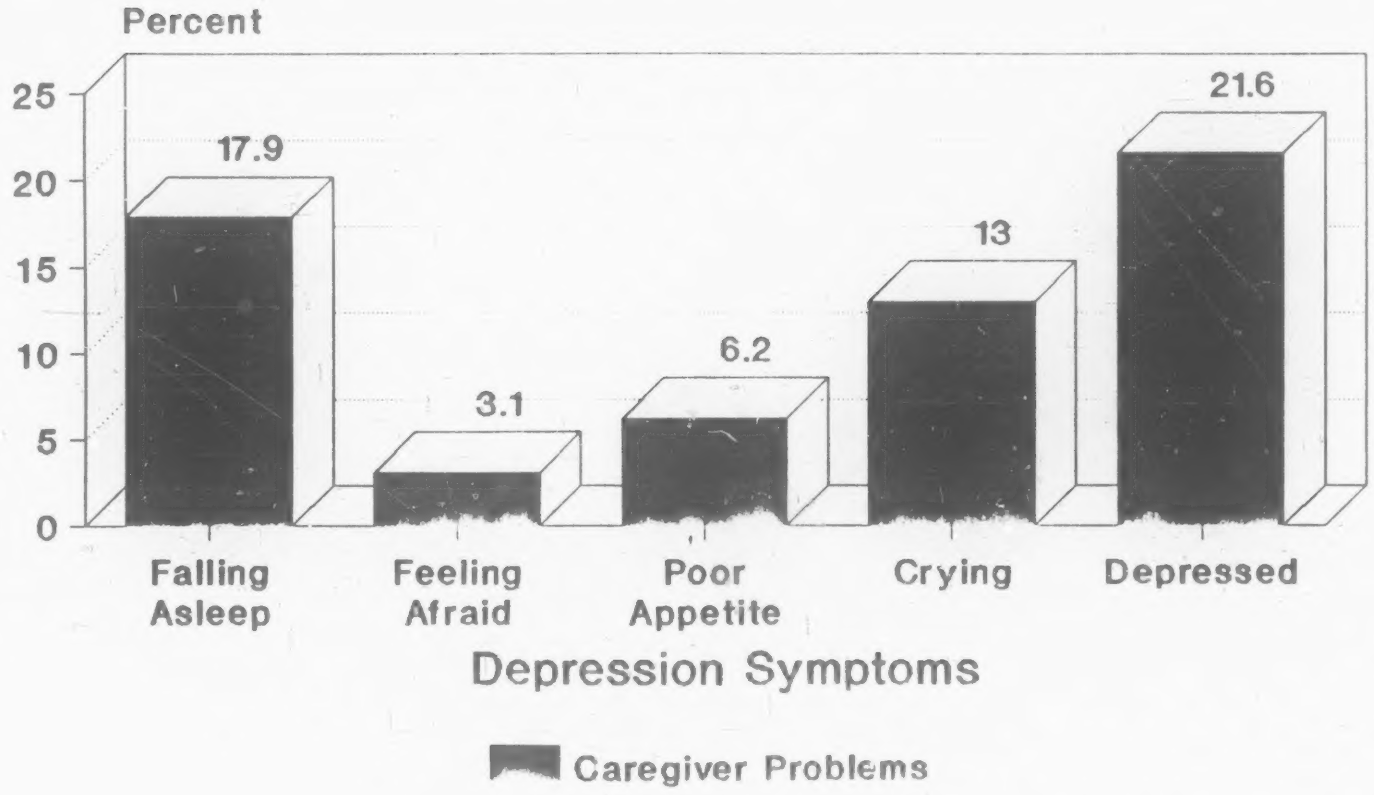


Figure 5-10

the arteries and problems remembering. Again, the 65 to 74 year group is highest for hardening of the arteries, but memory problems are linearly related.

When observing the depressive symptom scale developed for the caregivers, the 65 to 74 year group is highest on all categories with the exception of feelings of depression. For three of those measures, the oldest caregivers reported the smallest number of problems. These differences are not statistically significant.

Since these chronic conditions often precede the development of IADL or ADL limitations which in turn affect the caregiver's ability to perform the caregiving role, this study directed its attention to the treatment patterns of chronic conditions for caregivers. For any caregiver who reported the presence of one of the twenty chronic health probes, a series of follow-up questions asked if the caregiver was receiving any treatment for the difficulty. Responses were coded as "No help sought," "Help sought, none prescribed," "Help prescribed professionally," "Self-prescribed help," "Combination," and when responses were not offered, "Missing."

Table 5-2 summarizes the findings. Caregivers are least likely to seek treatment or help for problems related to cognitive decline, memory loss, speaking without hesitating or forgetting, and understanding instruction. A majority of caregivers do not seek help for problems with depression, stress, or anxiety; other emotional problems; difficulties with teeth, gums or dentures; and hearing problems. All caregivers who had cancer or experienced strokes report professional help, and almost 94% of those reporting hypertension receive professional help. Heart problems also result in professional help for more than 91% of the caregivers. Caregivers are more likely to self-prescribe for problems with arthritis than for any other difficulty. Almost 11% of the caregivers self prescribe for back problems, and less than half receive professional help.

In addition to analyzing the individual impairment variables for the caregivers, grouped variables were developed. Mean scores for ADL impairments, IADL impairments, general physical impairments (chronic health measures), impairment in cognition (memory problems difficulty understanding instruction and difficulty speaking without hesitating or forgetting), and mental health

Table 5-2

HEALTH PROBLEM PREVALENCE LEVELS & TREATMENT PATTERNS FOR CAREGIVER'S PROBLEMS

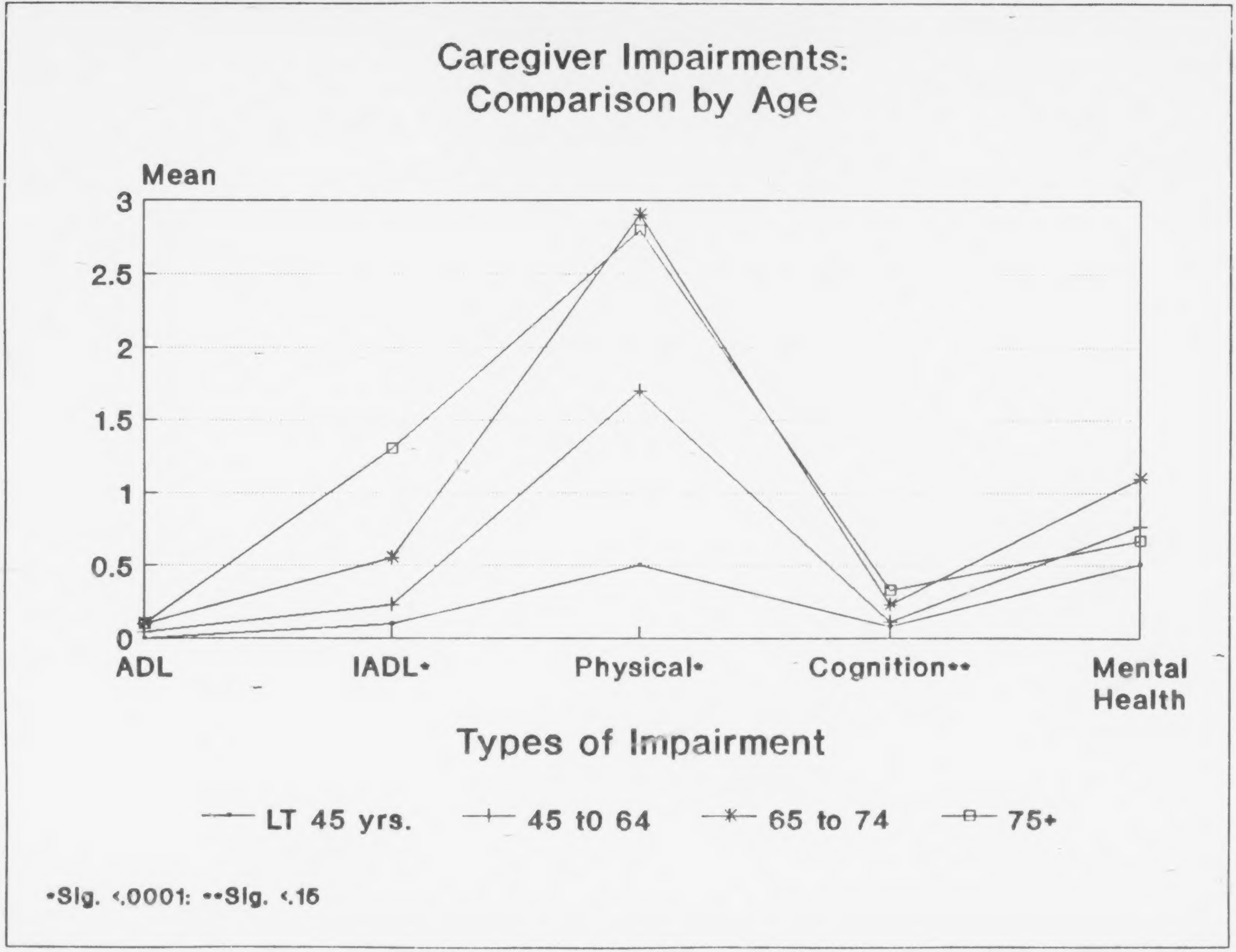
		Treatment					
Difficulty	Prevalence	No Help Sought	Help Sought/ None Prescribe	Profess. Prescribe	Self Prescribe	Combin	DK
Breathing	13.0%	23.8%	23.8%	42.9%	4.8%	-	4.8%
Hearing	16.8	64.3	25.0	7.1	3.6	-	-
Memory Loss	8.1	100.0	-	-	-	-	-
Speak w/o hesitate	3.1	100.0	-	-	-	-	-
Understand Instruction	3.7	100.0	-	-	-	-	-
Depressed/ Stress/Anxiety	11.2	77.8	5.6	16.7	-	-	-
Other emotional problems	3.1	66.7	16.7	16.7	-	-	-
Teeth/Gums/ Dentures	12.4	65.0	10.0	15.0	10.0	-	-
Alzheimer's	0	0	0	0	0	0	0
Eye Diseases	12.4	10.0	40.0	50.0	0	0	0
Parkinson's	0.6	-	-	-	-	-	-
Kidney Prob.	6.2	10.0	10.0	70.0	10.0	-	-
Heart Cond.	14.9	4.2	4.2	91.7	-	-	-
Hard. Arteries	3.1	0	33.3	66.7	-	-	-
Hypertension	30.4	4.1	2.0	93.9	0	0	0
Cancer	4.3	-	-	100.0	-	-	-
Stroke	1.2	-	-	100.0	-	-	-
Arthritis	34.2	23.6	1.8	34.5	34.5	3.6	1.8
Diabetes	7.5	8.3	8.3	83.3	-	-	-
Back Problems	24.2	23.7	21.1	42.1	10.5	2.6	-

impairments (depression, anxiety or stress, emotional problems or difficulties sleeping, frequent crying, falling asleep, or feeling afraid). Differences in mean scores were compared for several demographic categories of caregivers. Figures 5-11 through 5-17 illustrate the findings. Although differences are considered statistically significant only at the .05 level or less, differences significant at the .15 level or less are also described since the sample is small. These differences indicate the possibility of a relationship which might warrant further investigation with larger samples.

The differences in average levels of impairment by age present some interesting variations (Figure 5-11). As would be expected, the youngest caregivers report the lowest mean scores of impairments. However, the oldest caregivers do not necessarily report the highest levels of impairment. No differences are noted for average number of ADL impairments. The oldest group does report significantly higher mean scores in IADL impairments which would indicate a need for supportive chore services for caregivers to assist them in their caregiving activities. The 65 to 74 year group actually reports a higher mean number of physical impairments than other age groups. The oldest group does score marginally higher in problems with cognition than other groups, but they rank third among the four age groups in mental health difficulties. The 65 to 74 year group rank highest in mental health problems, and the 45 to 64 group ranks second.

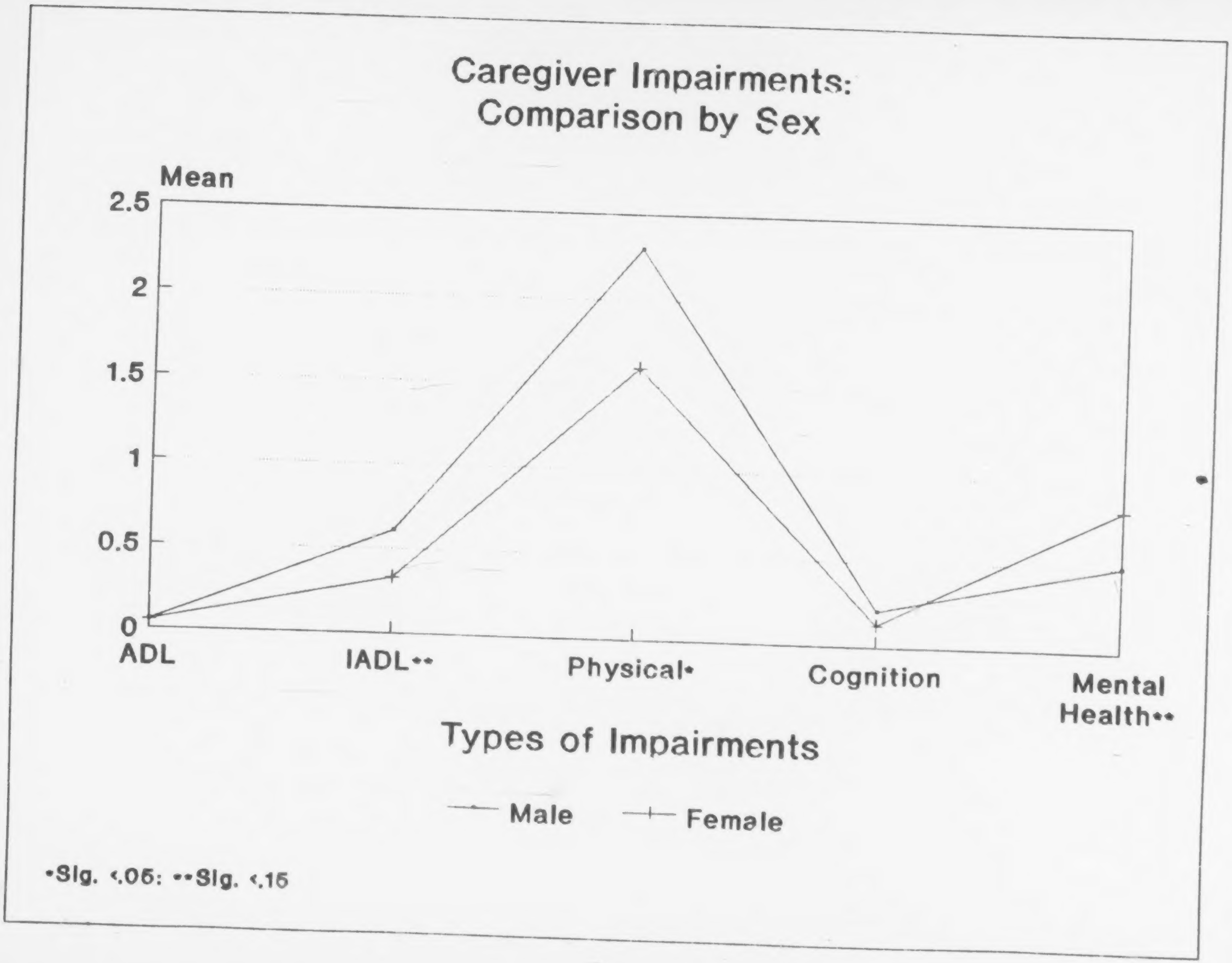
Male caregivers rank higher than female caregivers on three of the five composite measures. They report significantly higher average scores in physical impairments, and differences in levels of IADL impairment approach significance. Males are higher than females in cognition problems and identical in levels of ADL impairments, but neither of these measures approaches significance. Females also report marginally higher levels of mental health problems although this finding may reflect the greater social acceptability for females to admit feelings of depression, anxiety or feeling like crying frequently (Figure 5-12).

Spousal caregivers report higher means on each of the five composite variables with statistically significant differences in levels of IADL impairment, Physical and Cognitive Impairment, and differences in mental health impairments approach significance. Child caregivers are the



*Sig. <.0001; **Sig. <.15

Figure 5-11



*Sig. <.05: **Sig. <.15

Figure 5-12

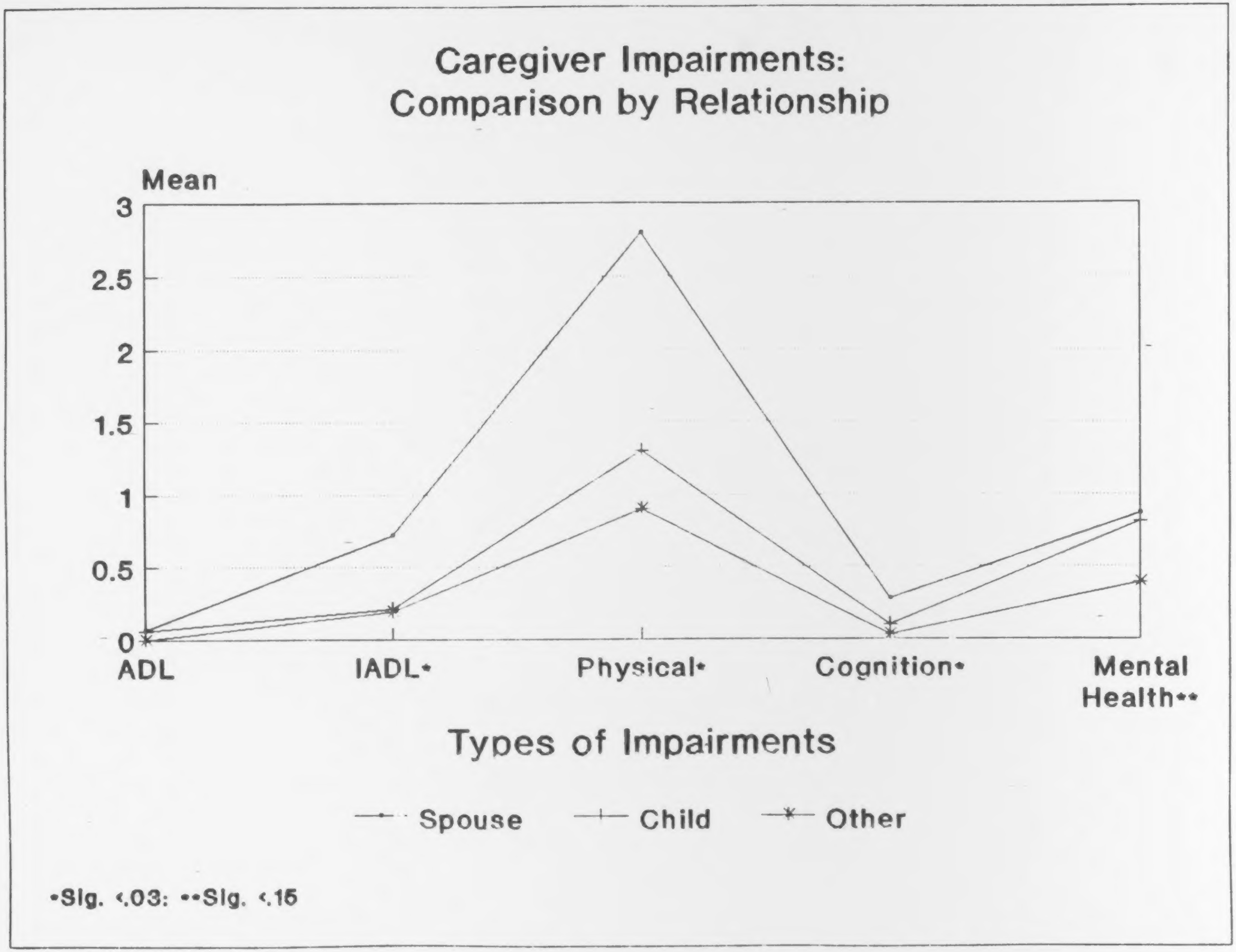
intermediate group in average impairments, and caregivers in the "other" category are the least impaired (Figure 5-13).

Caregivers living in the same household with the dependent elder are more impaired than those living outside the household on each of the five measures with the exception of mental health. Differences are statistically significant only for physical impairments. None of the other differences approach significance (Figure 5-14).

Caregivers who are retired report significantly higher average levels of IADL and physical impairments. Problems in cognition are reported by more of the part-time employed caregivers, and these differences approach significance. Higher average levels of mental health difficulties are reported by individuals who are unemployed for health reasons or to care for the dependent elder. These differences do not approach significance (Figure 5-15).

Caregivers who have never married report the lowest levels of impairments in all five composite categories. Differences are statistically significant for physical impairment levels and approach significance for impairment in IADL measures. In each category, married caregivers report the highest mean scores (married caregivers are not necessarily spouses of the dependent elder) (Figure 5-16).

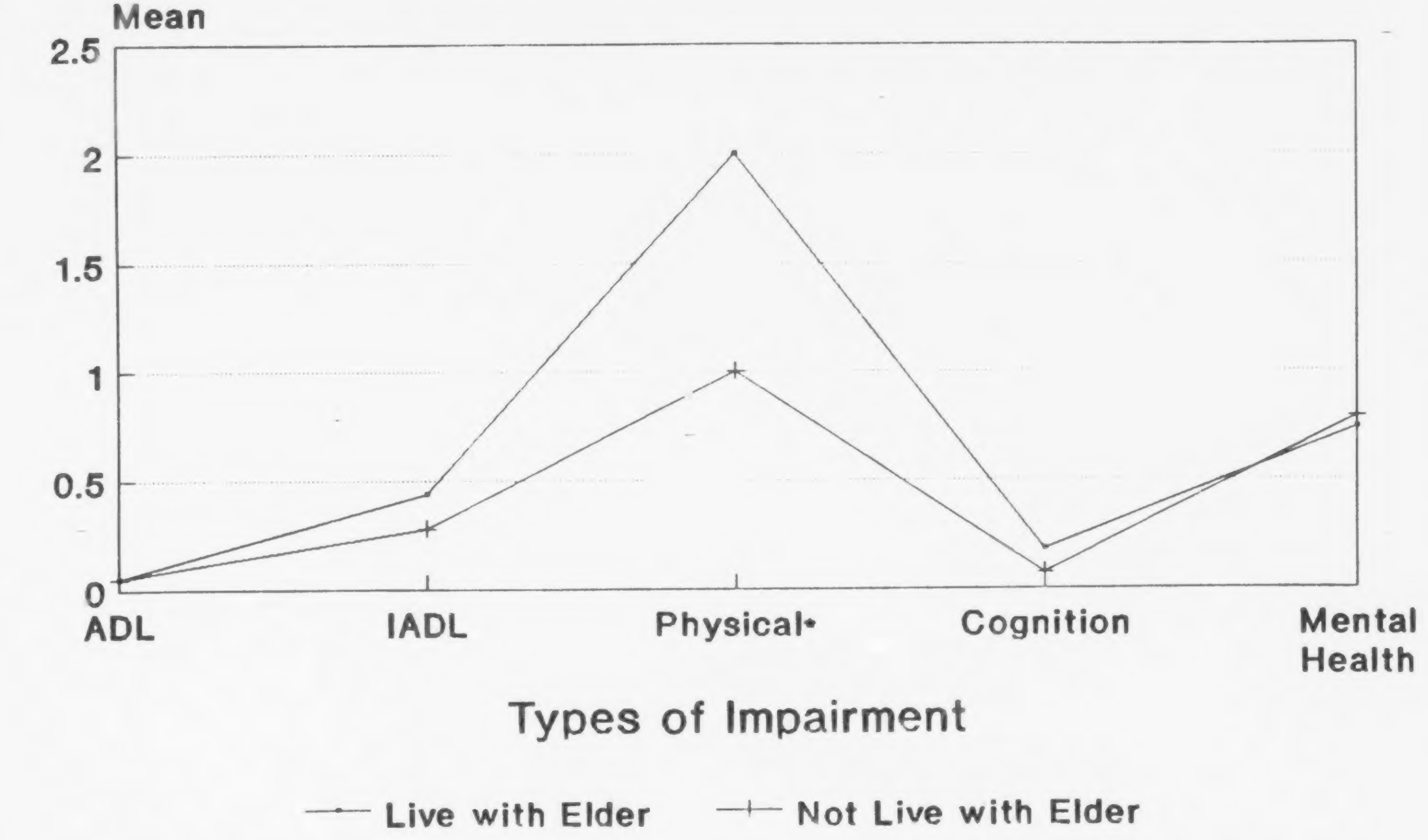
Higher levels of education are linked with lower levels of impairment in each category except mental health. Caregivers with postsecondary education report the highest levels of mental health impairments, and these differences approach significance. Caregivers whose educational levels are less than high school report significantly higher levels of physical and cognitive impairment than other caregiver types (Figure 5-17).



•Sig. <.03; ••Sig. <.15

Figure 5-13

Caregiver Impairments: Comparison by Place of Residence



•Sig. <.004

Figure 5-14

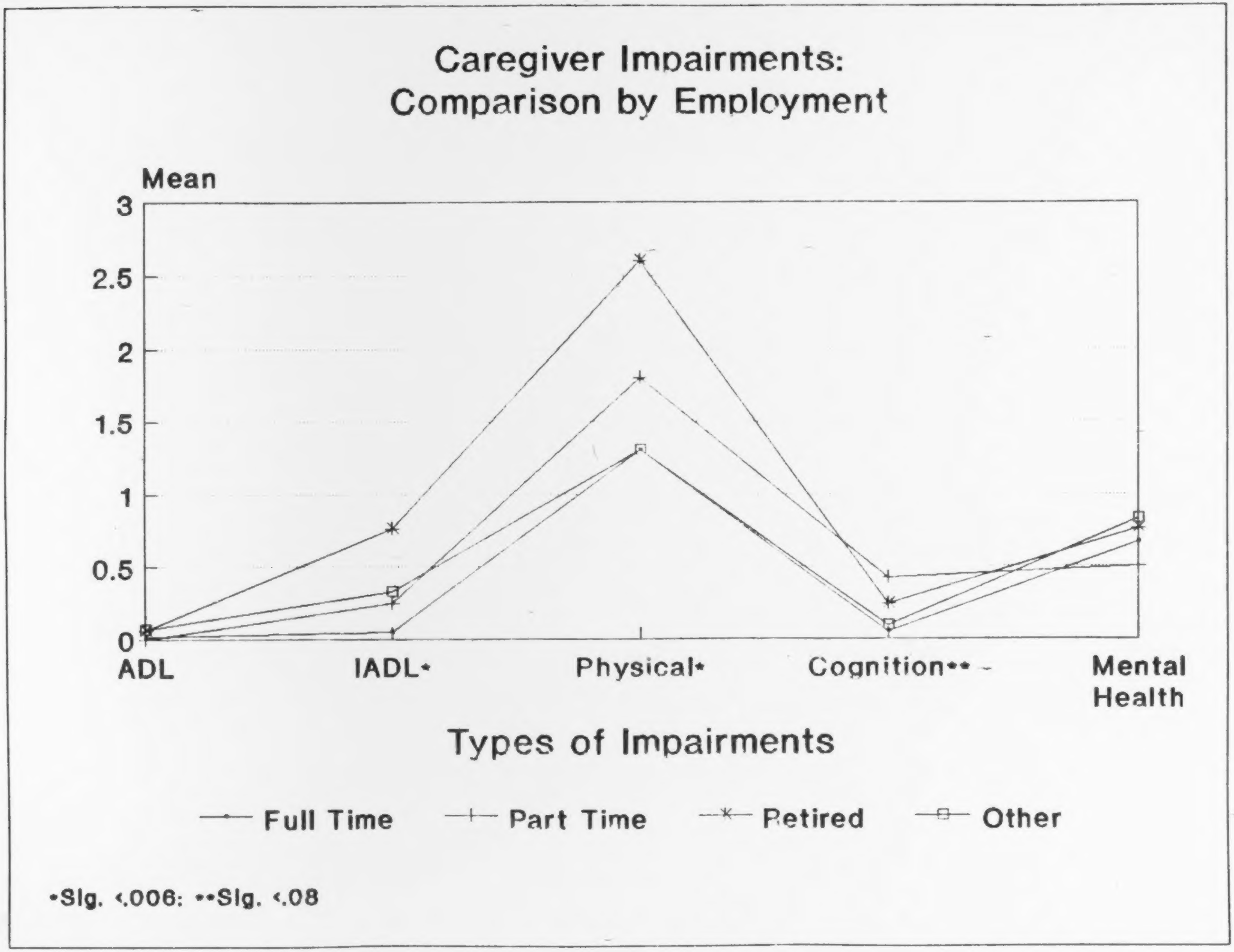

Caregiver Impairments:
Comparison by Employment
Mean
3
2.5
2
1.5
1
0.5
0
ADL
IADL*
Physical*
Cognition**
Mental Health
Types of Impairments
Full Time
Part Time
Retired
Other
*Sig. <.006: **Sig. <.08

Figure 5-15

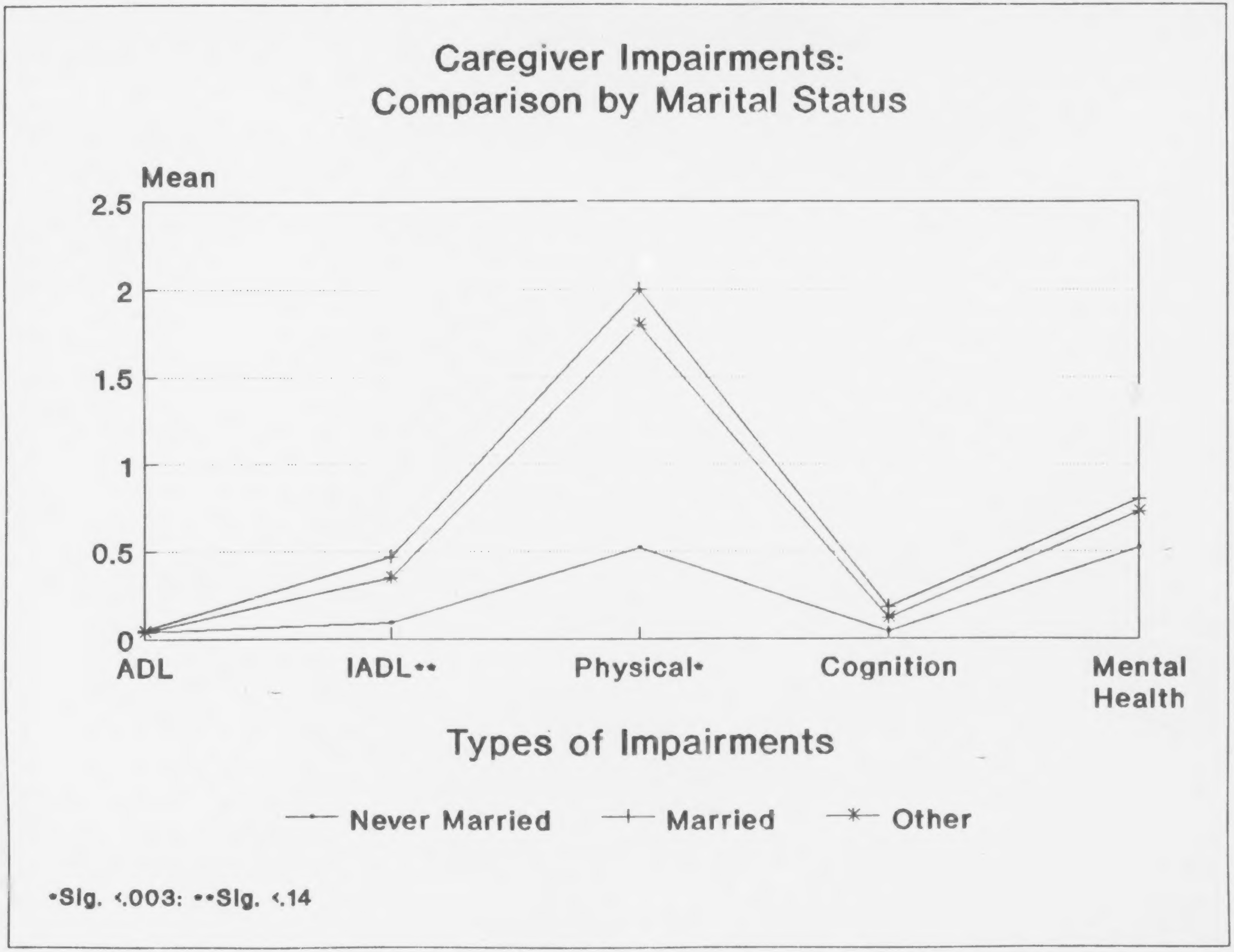

Caregiver Impairments:
Comparison by Marital Status
Mean
2.5
2
1.5
1
0.5
0
ADL
IADL**
Physical*
Cognition
Mental Health
Types of Impairments
Never Married
Married
Other
*Sig. <.003: **Sig. <.14

Figure 5-16

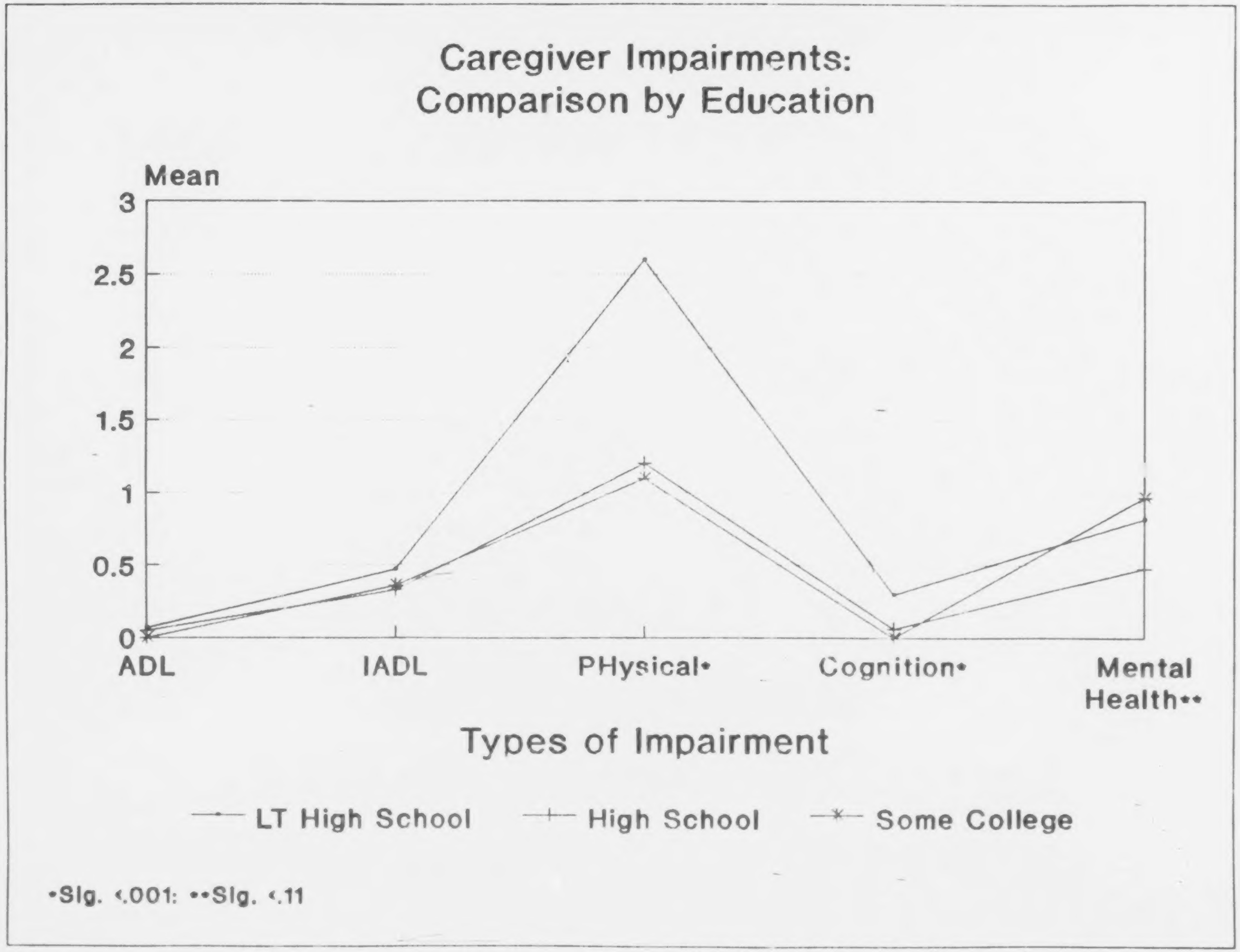

Caregiver Impairments:
Comparison by Education
Mean
3
2.5
2
1.5
1
0.5
0
ADL
IADL
PHysical•
Cognition•
Mental Health••
Types of Impairment
LT High School
High School
Some College
•Sig. <.001; ••Sig. <.11

Figure 5-17

CHAPTER 6.0
IN-HOME HEALTH AND PERSONAL CARE, CHORE SERVICES AND SERVICES DELIVERED AT COMMUNITY SITES

An understanding of the role performed by the formal service sector both in lieu of informal caregivers and in cooperation with informal caregivers is a critical issue of concern both to local and federal policy makers. In the ALSHA, a paradigm of service provision was developed to analyze in-home health and personal care services, in-home chore services, and services delivered primarily in the community (Harlow, Wilson, Rosentraub, 1987). That same paradigm was applied in the caregiver subsample.

In-home health and personal care (HPC) services involve formal assistance to address any ADL limitation. Chore services (CS) involve any formal assistance in the home for impairments in IADL. Continuum of care, formal service provision is identified both for dependent elders and for caregivers from the following probes: case management; visiting nurse or therapy, such as speech, physical or occupational; noon meal at senior center; home delivered meal; adult day care; homemaker or chore service; part-time or occasional help; caregiver support groups (only for caregiver); telephone reassurance; lifeline emergency service; friendly visitor; employment services; mental health counseling; legal services; fitness or health education program; and respite services (caregiver only). These services may be delivered in-home or in the community and are not directly linked to a specific ADL or IADL difficulty. Therefore, the average scores computed for a composite variable of community-based continuum of care services should overlap and include the more specific subcategories of in-home health and personal care and in-home chore services.

Average number of services provided by the formal sector for assistance with ADL difficulties is less than 1 per person for the entire sample. This formal assistance may be in addition to or in lieu of assistance from the primary informal caregiver. Table 6-1 summarizes the mean formal utilization scores by demographic characteristics of caregivers and dependent elders. Male caregivers are significantly more likely to report formal service utilization for their dependent elder than are female caregivers. Formal services are more often used for female dependent elders. Older caregivers rely

TABLE 6-1
RELIANCE ON FORMAL HELPERS FOR HEALTH AND PERSONAL CARE FOR THE DEPENDENT ELDER BY SALIENT DEMOGRAPHIC CHARACTERISTICS

Formal Help for HPC	Mean	F	Significance
Sample	.31		
Age of Caregiver			
LT 45 years	0.0	2.6	.06
45 to 64	.29		
65 to 74	.39		
75 or older	.81		
Sex of Caregiver			
Male	.63	4.4	.04
Female	.21		
Relationship to Elder			
Spouse	.39	.50	.61
Child	.21		
Other	.36		
Marital Status of Caregiver			
Never married	.30	.08	.92
Married	.29		
Other	.39		
Employment Status of Caregiver			
Full-time	.19	2.0	.12
Part-time	.08		
Retired	.60		
Other	.15		
Educational Level of Caregiver			
LT High School	.34	.08	.93
High School	.27		
Post-secondary	.28		
Race of Caregiver			
White	.37	1.3	.26
Non-white	.15		

Table 6-1 (cont.)
RELIANCE ON FORMAL HELPERS FOR HEALTH AND PERSONAL CARE FOR THE DEPENDENT ELDER BY SALIENT DEMOGRAPHIC CHARACTERISTICS

Formal Help for HPC	Mean	F	Significance
Live with Elder			
Yes	.35	.35	.71
No	.19		
Receive Medicaid			
Yes	.33	.01	.93
No	.31		
Sex of Dependent Elder			
Male	.07	4.5	.04
Female	.44		
Age of Dependent Elder			
55 to 64 years	.19	1.5	.21
65 to 74	.41		
75 to 84	.11		
85 or older	.57		

most heavily on formal services for the dependent elder, but the level of significance is .06. Reliance on formal services is virtually identical for Medicaid and non-Medicaid households.

Utilization of in-home chore services linked to specific IADL impairments in the dependent elder is more often impacted significantly by demographic characteristics than is true for home health and personal care services. Age of the caregiver significantly impacts utilization with older caregivers reporting highest average utilization. Male caregivers are significantly more likely to utilize formal services for the dependent elder than are female caregivers, and full-time employed caregivers are more likely to use formal assistance than are part-time or "other" categories. Caregivers who are retired report the highest utilization among all employment categories (Table 6-2).

Patterns of utilization for each of the continuum of care services are reported both for dependent elders and for caregivers in Table 6-3. Visiting nurse or some form of therapy, paid, live-in help, and friendly visitors are the services utilized most often by dependent elders (15.4%, 13.6% and 12.3% respectively). Almost 10% report using noon meals at senior centers, and 8.6% receive home-delivered meals. Almost 5% receive homemaker or chore services, and 4.3% report case management services. All other services are utilized by less than 2%, with utilization of adult day care, lifeline emergency services, employment services or fitness or health education reported by no respondents.

Formal assistance for the caregivers is most likely to be in the form of a paid, live-in assistant. This finding illustrates the importance of viewing the caregiving household as one appropriate service target since this type of assistance overlaps both caregiver and dependent elder needs. Friendly visitors, one of the three most frequently used services for dependent elders, is also mentioned by almost 7% of the caregivers. Slightly more than 2% of the caregivers take noon meals at senior centers. All other services are used by fewer than 2% of the caregivers. No utilization of adult day care, caregiver support groups, lifeline emergency, employment services or fitness or health education programs is reported.

Two grouped variables were developed to measure total participation in the formal, community-based service system both for the dependent elder and the caregiver. Table 6-4 summarizes the comparison of means for utilization of formal services for elders by demographic

TABLE 6-2

RELIANCE ON FORMAL HELPERS FOR CHORE SERVICES AMONG DEPENDENT ELDERS BY SALIENT DEMOGRAPHIC CHARACTERISTICS

Use of Chore Services	Mean	F	Significance
Sample	.52		
Age of Caregiver			
LT 45 years	.21	4.2	.007
45 to 64	.41		
65 to 74	.84		
75 or older	1.1		
Sex of Caregiver			
Male	.92	7.0	.009
Female	.40		
Relationship to Elder			
Spouse	.72	1.7	.19
Child	.39		
Other	.45		
Marital Status of Caregiver			
Never Married	.22	1.6	.20
Married	.62		
Other	.38		
Employment Status of Caregiver			
Full-time	.50	3.6	.007
Part-time	.17		
Retired	.93		
Other	.22		
Educational Level of Caregiver			
LT High School	.49	.28	.75
High School	.61		
Postsecondary	.46		
Race			
White	.61	2.4	.12
Non-white	.32		

TABLE 6-2 (cont.)

RELIANCE ON FORMAL HELPERS FOR CHORE SERVICES AMONG DEPENDENT ELDERS BY SALIENT DEMOGRAPHIC CHARACTERISTICS

Use of Chore Services	Mean	F	Significance
Live with Elder			
Yes	.50		
No	.50		
Receive Medicaid			
Yes	.75	1.1	.31
No	.50		

TABLE 6-3

USE OF AND KNOWLEDGE ABOUT AVAILABILITY OF FORMAL SERVICES

Service	Elder	Caregiver	Availability		
			Yes	No	Don't Know
Case management	4.3%	1.9%	40.1%	13.0%	46.9%
Visiting nurse/ therapy	15.4	0.6	74.7	8.6	16.0
Meal at Sr. Center	9.9	2.5	74.1	11.1	14.2
Home delivered meal	8.6	1.9	60.5	21.6	17.9
Adult day care	0.0	0.0	18.5	34.0	47.5
Homemaker/chore	4.9	1.2	35.2	24.7	40.1
Part-time paid help	2.5		26.5	24.7	40.1
Paid live-in help	13.6	10.5	54.9	20.4	24.7
Caregiver support group	0.0	0.0	1.2	24.1	74.7
Telephone reassurance	1.9	1.9	18.5	30.2	51.2
Lifeline emergency	0.0	0.0	19.8	29.0	51.2
Friendly visitor	12.3	6.8	34.0	23.5	42.6
Employment service	0.0	0.0	35.2	21.6	43.2
Mental health coun.	1.2	0.6	38.3	18.5	43.2
Legal services	1.2	1.9	51.2	16.0	32.7
Fitness/health education	0.0	0.0	17.9	22.8	59.3
Respite care	0.0	1.2	5.7	30.2	64.1

TABLE 6-4

RELIANCE ON FORMAL, COMMUNITY BASED SERVICES FOR ELDER BY CAREGIVER AND DEPENDENT ELDER CHARACTERISTICS

Characteristics	Mean	F	Significance
Sample	.75		
Age of Caregiver			
LT 45 years	.80	.25	.86
45 to 64	.80		
65 to 74	.65		
75 or older	.67		
Sex of Caregiver			
Male	.97	2.7	.10
Female	.68		
Relation to Elder			
Spouse	.55	2.1	.12
Child	.90		
Other	.77		
Marital Status of Caregiver			
Never Married	.70	.08	.92
Married	.75		
Other	.81		
Employment Status of Caregiver			
Full-time	1.1	2.1	.11
Part-time	.42		
Retired	.71		
Other	.65		
Educational Level			
LT High School	.73	.42	.66
High School	.69		
Postsecondary	.87		
Race of Caregiver			
White	.70	1.1	.31
Non-white	.87		
Live with Elder			
Yes	.64	5.3	.02
No	1.0		
Sex of Dependent Elder			
Male	.70	.25	.62
Female	.78		

Table 6-4
RELIANCE ON FORMAL, COMMUNITY-BASED SERVICES FOR ELDER BY CAREGIVER AND DEPENDENT ELDER CHARACTERISTICS

Age of Elder			
55 to 64 years	.80	1.3	.27
65 to 74	1.1		
75 to 84	.94		
85 or older	.90		
Receive Medicaid			
Yes	1.1	4.3	.04
No	.69		

characteristics of the caregiver and the elder. None of the differences noted achieve the .05 level of significance. Some variations which approach significance are noted for sex of caregiver with male caregivers using more community-based services than females (P=.10). Full-time employed caregivers report more reliance on the formal system (P=.11) than caregivers with other employment statuses, and elders cared for by their children utilize more formal services than elders cared for by spouses or "other" caregivers (P=.12).

Use of formal assistance for the caregiver is directly and significantly impacted by several demographic characteristics. Reliance on formal service is influenced by employment status of the caregiver. Mean level of utilization for retired caregivers is more than double that of the other groups (P=.001). This finding reflects the older average age of the retired caregiver and illustrates the level of impairments experienced by caregivers in various employment categories. Older age is significantly related to reliance on services (P=.01), and male caregivers report greater reliance on formal services for themselves than do females (P=.04). Spouses use more formal support for themselves than do children or other caregivers (P=.06); married and "others" use more services than never married caregivers (P=.06); and whites report more reliance on formal services than non-whites (P=.11) (Table 6-5). Within the categories of spouse, child and other caregivers, sex of caregiver does not significantly impact the patterns. Male spouses use more services for themselves than do female spouses and more services are used for the elder when the caregiver is male in all three categories of relationship Female caregivers in the "other" category use more services for themselves but male caregivers in the "other" category use more services for the elder. These two differences approach significance, but none of the differences actually achieve the .05 level required for statistical significance (Table 6-6).

Utilization of services may also be a function of awareness about the availability of formal services. Table 6-3 summarizes the caregiver's knowledge about availability of various formal services. Three services appear to yield more definite yes/no responses for availability. Fewer than 14% do not know the availability of meals at senior centers, 16% do not know about visiting nurse or therapy services, and 17% do not know about home-delivered meals. Unfamiliarity with availability

TABLE 6-5

RELIANCE ON FORMAL, COMMUNITY BASED SERVICES FOR CAREGIVERS BY CAREGIVER AND ELDER CHARACTERISTICS

Characteristics	Mean	F	Significance
Sample	.31		
Age of Caregiver			
LT 45 years	.10	3.7	.01
45 to 64	.29		
65 to 74	.42		
75 or older	.57		
Sex of Caregiver			
Male	.47	4.3	.04
Female	.25		
Relation to Elder			
Spouse	.44	2.8	.06
Child	.22		
Other	.23		
Marital Status of Caregiver			
Never married	.04	2.9	.06
Married	.34		
Other	.38		
Caregiver Employment			
Full-time	.12	5.6	.001
Part-time	.25		
Retired	.55		
Other	.20		
Educational Level of Caregiver			
LT High School	.37	1.5	.23
High School	.19		
Postsecondary	.33		
Race of Caregiver			
White	.35	2.6	.11
Non-white	.19		
Live with Elder			
Yes	.36		
No	.14		

TABLE 6-5 (cont.)
RELIANCE ON FORMAL, COMMUNITY-BASED SERVICES FOR CAREGIVERS BY CAREGIVER AND ELDER CHARACTERISTICS

Sex of Elder			
Male	.30	.01	.94
Female	.31		
Age of Elder			
55 to 64	.31	.57	.64
65 to 74	.30		
75 to 84	.25		
85 or older	.41		

Table 6-6

USE OF FORMAL, COMMUNITY-BASED SERVICES BY RELATIONSHIP BY SEX OF CAREGIVER

Recipient	Mean	Spouse		Child		Other	
		Male	Female	Male	Female	Male	Female
Caregiver	.31	.61	.34	.36	.20	0	.26*
Elder	.75	.83	.39	1.1	.87	1.5	.67**

* P=.06
**P=.12

of a service appears to be the biggest problem for caregiver support groups (75%); respite care (64.1%); fitness\health education (59.3%); telephone reassurance (51.2%); and lifeline emergency (51.2%). Services most likely to be named as not available are adult day care (34%); respite care (30%); and telephone reassurance (30%).

CHAPTER 7.0
THE ECONOMICS OF CAREGIVING

The stress and problems reported by family caregivers may frequently center around the economic demands and impacts of providing care. One area of concern focuses on the actual purchases of services for the elder and the costs related to these activities. A second cost may be in terms of sacrifice of some needed service or activity for other family members in order to meet the needs of the dependent elder. And, opportunity costs in terms of lost employment for the caregiver may also play a role in caregiver burden and perceptions of stress.

To assess the economic burden of caregiving in Arkansas, caregivers were first asked a screening question, "Does any portion of your household income go toward taking care of ____? This would include even the cost of insurance coverage you have for him/her." If the caregiver answered affirmatively, he/she was asked to report the actual amount per month. Finally, the caregiver was queried with a list of possible sources of financial assistance and asked whether any of those six specific sources paid the caregiver or helped meet the costs of taking care of the dependent elder. The six sources named were Medicaid, Medicare, private insurance, religious groups, United Way or other agency, and other family members. A seventh, open-ended choice was offered if additional sources were utilized which were not covered in the six presented.

While these questions focused primarily on the actual outlay or sources of income to care for the elder, a second type of question addressed the opportunity cost issue related to employment. Seven career related questions were posed for each caregiver:

1. Were you working outside the home when ___ first needed care?

2. Have you had to reduce your employment time, take sick leave or vacation to care for ___?

3. Did you retire early, quit your job, or reduce your working hours because of caring for ___?

4. What is the total number of years you have worked outside the home?

5. What is (was) your occupation?

6. Do you/did you think of your work as a career or just a job?

Foregoing purchases or service for other family members is measured in an overall scale of burden discussed in Chapter 8.0.

The average amount of out-of-pocket expenses paid by all caregivers in the sample is less than $30/month. This amount does not include any amounts paid directly by the elder him/herself. National figures indicate that the elderly aged 65-74 spend 8.4% of their income on health care and those 75 or older spend 13.5% (U.S. Dept. of Labor, August, 1986). These figures represent the norm for all elders, and thus, are probably substantially lower than the amount one might expect to find among these impaired and dependent elders.

Table 7-1 relates the dollar amounts expended by caregivers only and illustrates the differential impacts caregiving has for various demographic groupings. Statistically significant differences are noted based on the sex, relationship and employment status of the caregiver. Male caregivers spend an average of $86/month on services while females in this sample spend $11/month. Spouses spend more than double the amount spent by caregivers in other relationships, and individuals who are retired average $71/month, substantially higher than any other employment group. The impact of caregiver's age upon average expenditures approaches significance (P=.06) with caregivers in the 65 to 74 age group averaging more than $76/month, more than double the next closest age group, the 75 or older.

In caregiving situations where Medicare and/or Medicaid assistance is reported, average out-of-pocket expenditures are lower than in the households receiving no assistance, but differences are not statistically significant. Nor does the receipt of assistance from family, friends or other sources significantly impact outlays. Very substantial differences are noted for households receiving some assistance for services from private insurance. Caregivers who report insurance assistance average $123/month in personal outlays compared to $16/month for non-insurance assisted households. Since many insurance policies are clearly restrictive for many services unless some very stringent health status definitions are met, these households may represent the most seriously disabled elders.

Table 7-1

AVERAGE MONTHLY OUT OF POCKET INCOME DEDICATED TO CARE OF DEPENDENT ELDER (N = 116)

SAMPLE 27.19

Caregiver Age	**Average $Month**	**F**	**Significance**
LT 45	$ 3.57	2.59	.06
45 to 64	17.59		
65 to 74	76.39		
75 or older	34.78		
Age of Dependent Elders			
55 to 64	41.22	.44	.75
65 to 74	38.97		
75 to 84	20.07		
85 or older	16.30		
Sex of Caregiver			
Male	86.20	11.78	.0008
Female	10.99		
Caregiver Marital Status			
Never Married	0.0	1.75	.18
Married	38.48		
Other	0.00		
Relation of Caregiver			
Spouse	59.46	3.14	.05
Child	6.45		
Other	25.00		
Caregiver Race			
White	35.56	1.83	.18
Non-White	7.86		
Sex of Caregiver			
Male	86.20	11.78	.0008
Female	10.99		

AVERAGE MONTHLY OUT OF POCKET INCOME DEDICATED TO CARE OF DEPENDENT ELDER (N = 116) CONT.

	Average $/Month	F	Significance
Number of Outside Income Assistance Sources			
None	19.65	.67	.57
One	54.00		
Two	23.15		
Three or more	27.50		
Education of Caregiver			
LT High School	15.40	.59	.55
High School	35.25		
Some College or Grad.	37.50		
Caregiver Employment Status			
Work full-time	13.64	2.56	.04
Work part-time	0.00		
Retired	71.43		
Unemployed for health/caregiving	5.00		
Health Status of Elder			
Good	9.34	1.36	.26
Average	5.00		
Fair	20.00		
Poor	51.43		
Place of Residence			
Live with elder	34.16	.54	.58
Live elsewhere	13.82		
Medicaid Assist			
Yes	5.00	.41	.66
No	30.61		
Medicare Assist			
Yes	19.73	.19	.83
No	31.09		
Insurance Assets			
Yes	122.75	6.5	.002
No	16.33		

AVERAGE MONTHLY OUT OF POCKET INCOME DEDICATED TO CARE OF DEPENDENT ELDER (N = 116) CONT.

	Average $/Month	F	Significance
Other Sources Assist			
Yes	0.0	.15	.86
No	28.17		
Family/Friends Assist.			
Yes	27.50	.03	.97
No	27.43		

In summarizing sources of assistance available to the caregiver, Medicare is the most frequently reported source (Figure 7-1). More than one-third of the caregivers report some assistance from Medicare for various services. (Sixteen percent of this sample of dependent elders are below the normal age of eligibility for Medicare). Fifteen percent of the dependent elders receive Medicaid support, and almost 12% report private insurance providing some assistance. No support is reported from religious organizations or from United Way or other agencies. Miscellaneous sources are mentioned by 5%. Family or friends contribute in 3.1% of the households. In more than half the households, 54.3%, there is no source of support; 25% report one source; 18.9% report two sources; and 1.8% report three or more.

In terms of policy development, one of the most frequently mentioned tools for providing caregiver support is via the Medicaid system. Table 7-2 describes the Medicaid recipients by demographic category. Caregiving households most likely to receive Medicaid assistance were significantly more likely to be non-white than white; the caregiver in these households is most likely to be a child of the dependent elder and least likely to be a spouse; more likely to reside apart from the elder than with him/her; and the caregiver is more likely to be employed full-time and least likely to be retired. Interestingly enough, although the types of caregivers in situations receiving Medicaid assistance vary along several demographic dimensions, the actual utilization of services is not impacted by receipt of Medicaid. As reported in Chapter 6.0, the utilization of services is virtually identical in Medicaid and non-Medicaid households. Given the findings on employment patterns and living with or apart from the dependent elder, it appears that availability of Medicaid support for some formal service assistance may enable more caregivers to remain in the workforce and may even encourage independent living for the elder.

The potential costs of caregiving in terms of employment issues appears in this sample to be a substantial issue. Slightly more than half the sample were working outside the home when the elder first required care (Table 7-3). In the employed or previously employed group, almost half, 46.2%, have reduced employment hours, taken sick leave or vacation to care for the elder. More than one-third, 34.5%, retired early or quit. An additional one-third, 32.1%, are considering retiring early,

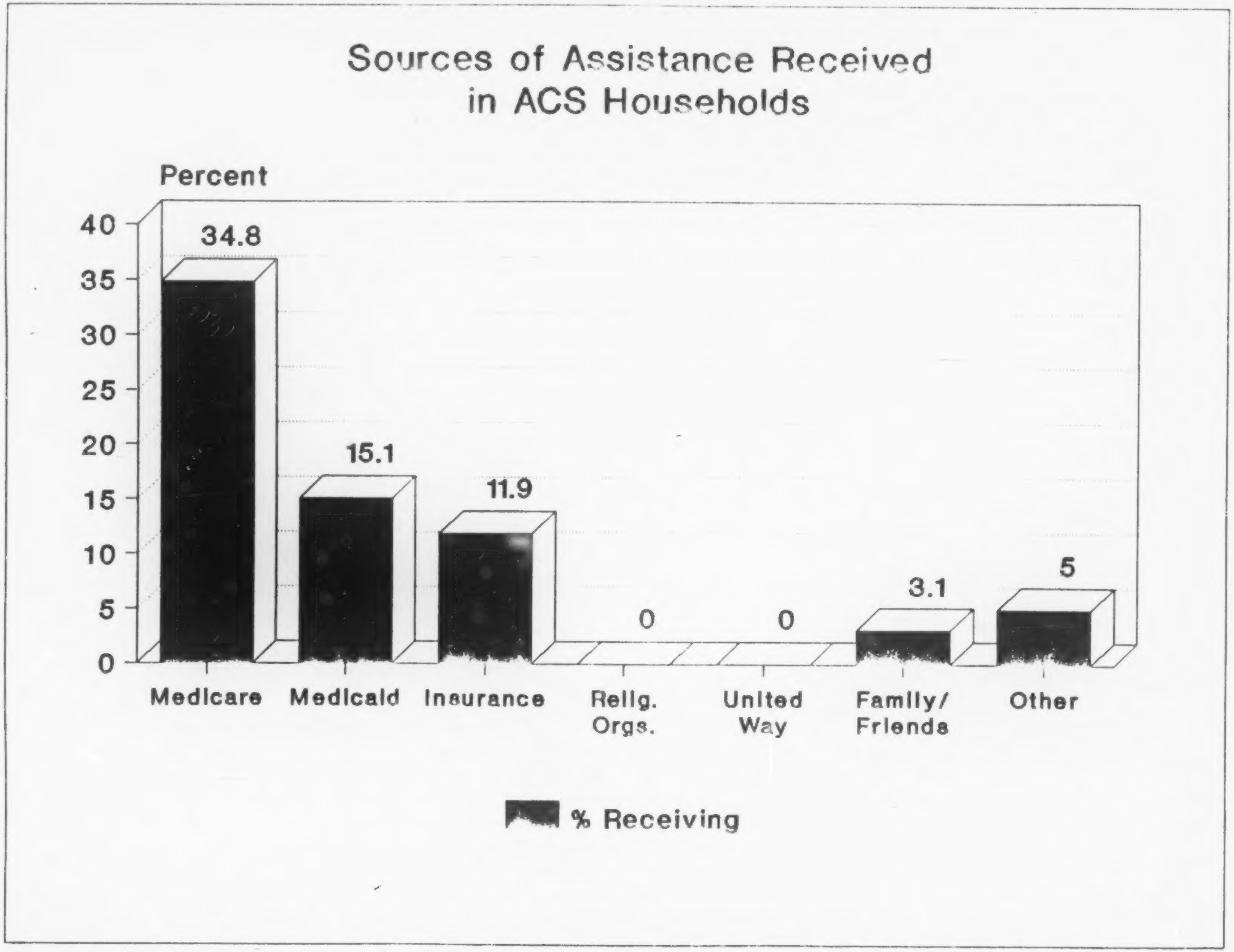


Figure 7-1

Sources of Assistance Received in ACS Households quitting their job or reducing hours to care for the dependent elder. Slightly more than half of the caregivers describe their work as just a job with 44.9% describing it as a career.

The oldest caregivers were least likely of the age groups to have worked outside the home when the dependent elder's problems began. Caregivers age 45 to 64 are significantly more likely than other groups to reduce their work hours or take sick leave or vacation time to care for the elder, and caregivers 65 to 74 are more likely than others to be considering early retirement, quitting or reducing work hours to care for the elder. Females are significantly more likely than males to report early retirement or quitting or to be considering these options or a reduction of hours than are male caregivers in this sample.

Racial or ethnic identity does not impact the employment variables for the caregivers in this sample (Table 7-4). Approximately one-third of the individuals who are currently retired or unemployed did work outside the home when the dependent elder first required care. Almost three-fifths, 58.5%, of the full-time employed caregivers have had to reduce employment time, take sick leave or use vacation to care for the elder. Caregivers with higher levels of educational attainment are more likely to have been working outside the home when caregiving began, and individuals with higher levels of education are more likely to perceive their work as a career rather than just a job. Married caregivers are more likely than others to have reduced employment, taken sick leave or vacation time to care for the elder. Four-fifths of the caregivers who do not live with the elder worked outside the home prior to beginning of caregiving responsibilities (Table 7-5).

Table 7-2

MEDICAID ASSISTANCE BY DEMOGRAPHIC CHARACTERISTICS

	Yes	No	Significance
Caregiver Age			
LT 45	19.4%	80.6%	.36
45 to 64	18.1	81.9	
65 to 74	6.7	93.3	
75 or older	9.5	90.5	
Caregiver Race			
White	9.6%	90.4	.005
Non-White	28.9	71.1	
Caregiver Sex			
Male	8.1	91.9	.27
Female	17.2	82.8	
Relation to Elder			
Spouse	6.7	93.3	.02
Child	23.6	76.4	
Other	11.1	88.9	
Live with Elder			
Yes	8.5	91.5	.008
No	31.7	68.5	
Caregiver Education			
LT High School	12.7	87.3	.08
High School	10.0	90.0	
Post-secondary	26.3	73.7	
Marital Status of Caregiver			
Never Married	9.5	90.5	.65
Married	15.2	84.8	
Other	19.2	80.8	

Table 7-2 (Cont.)

MEDICAID ASSISTANCE BY DEMOGRAPHIC CHARACTERISTICS

	Yes	No	Significance
Caregiver Employment Status			
Full-time	32.5	67.5	.0003
Part-time	18.2	81.8	
Retired	5.6	94.4	
Other	11.3	88.7	
Age of Elder			
55 to 64	8.1	91.9	.73
65 to 74	11.1	88.9	
75 to 84	16.7	83.3	
85 or older	14.3	85.7	

Table 7-3

CAREGIVER EMPLOYMENT HISTORY BY AGE AND SEX

		Age				Sex	
	Sample	LT 45	45 to 64	65 to 74	75+	Male	Fem
Working outside home at beginning	50.6	56.4	61.1	43.3	14.3$^{.0002}$	42.1	53.
Reduce employ, sick leave or vacation	46.2	30.4	60.5	33.3	0.0$^{.03}$	37.5	48.^{N}
Retire early or quit	34.5	46.7	31.1	53.3	0.0$^{.04}$	11.1	39.5$^{.0}$
Considering early retire/quitting or reducing hours	32.1	36.8	28.6	50.0	0.0^{NS}	0.0	39.5$^{.0}$
Perceive as career or job							
Career	44.9	46.4	49.2	40.0	50.0^{NS}	67.6	36.6$^{.000}$
Just a job	55.1	53.6	50.8	60.0	50.0	32.4	63

Table 7-4

CAREGIVER EMPLOYMENT HISTORY BY RACE AND EMPLOYMENT

		Race		Employment			
	Sample	White	Non-White	Full-Time	Part-Time	Retired	Unemployed
Working outside home at beginning	50.6	46.6	60.9 ^{NS}	95.2	54.5	31.5	35.2 ^{00}
Reduce employ, sick leave, vacation	46.2	49.1	40.0 ^{NS}	58.5	0	33.3	41.2 $^{.0}$
Retire early or quit	34.5	31.3	45.0 ^{NS}	21.7	25.0	29.4	6.5 $^{NS(}$
Consider early retire or reduction	32.1	38.9	17.6 ^{NS}	35.9	40.0	16.7	--- ^{NS}
Perceive as career or job							
Career	44.9	47.5	38.5 ^{NS}	57.1	27.3	45.1	36.4 ^{NS}
Job	55.1	52.5	61.5	42.9	72.7	54.9	63.6

Table 7-5

CAREGIVER EMPLOYMENT HISTORY BY EDUCATION, MARITAL STATUS AND LIVING ARRANGMENT

		Education			Marital Status			Live with Elder	
	Sample	LT High School	High School	Post-Second	Never Married	Married	Other	Yes	No
Work outside home at beginning	50.6	38.9	66.7	51.3$^{.01}$	47.8	48.7	61.5^{NS}	40.0	80$^{.00}$
Reduce employ, sick leave, vacation	46.2	40.0	51.4	44.4^{NS}	9.1	56.9	37.5$^{.01}$	40.0	53.^{N}
Retire early, quit	34.5	30.3	43.8	26.3^{NS}	66.7	31.7	33.3^{NS}	31.7	43.^{N}
Consider early retire, quit, reduce hours	32.1	17.6	34.8	46.2^{NS}	---	37.8	33.3^{NS}	32.1	29.^{N}
Perceive as career or job									
Career	44.9	26.3	59.1	55.9$^{.003}$	47.1	45.9	39.1^{NS}	41.4	52.^{N}
Job	55.1	71.7	40.9	44.1	52.9	54.1	60.9	58.6	47

CHAPTER 8.0
CAREGIVER BURDEN

The importance of the role of family caregivers in maintaining dependent elders in the community has been established in many studies. Frequently linked with performance of this role, however, is the concept of costs to the caregiver in terms of caregiver burden. These costs may be economic, requiring actual dollar outlays which must be allocated to care of a dependent elder; they may be in social-psychological or health terms with impact on the caregivers' physical or mental health or the health of the caregiver's family; or the costs may be in terms of lost opportunities, "opportunity costs."

Caregiver burden has often been assumed to vary based on the nature of the relationship of the caregiver to the dependent elder. Expectations for varying levels of stress are grounded in the concepts of "social exchange theory." Spouses may expect to spend at least some part of their later lives caring for their mate and because this function is part of a "social contract," the resulting stress or burden may be very different from that experienced by an adult child caregiver where the "social contract" for care of a parent may be less well defined.

To examine the issues of care burden among Arkansas caregivers, a version of the Cost of Care Index (Kosberg et al., 1984) was adapted for telephone administration. The original Kosberg instrument was based on a Likert-type scale of Strongly Agree to Strongly Disagree response modes. Pretesting on the Arkansas instrument indicated some difficulty and awkwardness following this pattern in a telephone survey. Response modes were modified to reflect frequency of perceptions rather than strength of perceptions. Response modes for 20 perceptions ranged on a 5 point scale from "Never" to "Almost Always." Questions ranged from perceptions of economic burden to impact on caregivers health, family relationships, ability to interact with others and mental attitude.

Table 8-1 summarizes the responses. For approximately two-thirds of the sample, caregivers deny any negative perceptions about their caregiving roles. For three of the four probes phrased positively (caregiving activities worth the effort) a large majority of caregivers agreed. Slightly more burden or dissatisfaction on the probe, "How often do you think _____ asks for help only when he/she

TABLE 8-1

PERCEPTIONS OF BURDEN REPORTED BY CAREGIVER

	Never	Rarely	Sometimes	Frequent	Constant
Caregiving keeps me tied down.	53.7	17.3	16.7	6.8	5.6
Elder demands more care than needed.	61.1	15.4	14.2	3.1	6.2
Caregiving makes me feel sad/depressed.	48.1	23.5	19.8	4.9	3.7
Caregiving prevents doing things needed at home	60.5	19.8	11.7	6.2	1.9
Caregiving puts strain on family relationships.	67.3	18.5	8.6	2.5	3.1
Meeting elder's health needs is worth effort.	1.9	1.9	1.9	17.9	76.5
Elder manipulates/tricks.	61.1	19.1	9.9	2.5	7.4
Elder keeps me from sleeping.	67.9	19.8	10.5	1.2	0.6
I do not have enough time for self.	57.4	16.7	14.8	6.8	4.3
Family must give up things due to expense of caring for elder.	76.5	14.2	4.3	2.5	-
Visiting/talking is worth effort.	4.3	-	1.2	23.5	71.0
Caregiving keeps friends away.	72.8	11.7	9.3	2.5	3.7
Caregiving hurts family's physical health.	85.2	8.6	4.3	1.2	0.6
Kept family from taking a vacation.	70.4	11.7	7.4	4.3	6.2
Caring for daily needs is worth effort.	0.6	-	1.2	19.1	79.0
Caregiving causes family problems.	75.3	15.4	4.9	1.9	2.5

TABLE 8-1 (cont.)
PERCEPTIONS OF BURDEN REPORTED BY CAREGIVER

Perceptions	Never	Rarely	Sometimes	Frequent	Constant
Elder only asks for help when really needs it.	11.7	8.0	6.2	24.7	49.4
Caused me to become nervous and anxious.	48.1	17.9	25.3	4.3	4.3
Hurt family's relationship with friends.	84.6	7.4	3.7	1.9	2.5
Hurt appetite.	94.4	1.2	1.9	-	2.5

really needs it?" is evident. Almost one-fifth responded never or rarely, indicating a perception that some requests for aid from the dependent elder are unnecessary. Almost one-third report perceptions of being tied down. One-quarter of the caregivers feel that they do not have enough time for themselves, and more than one-third report feelings of nervousness or anxiousness.

Single variables from this twenty item scale were grouped by content into four subcategories: social burden (ability to interact with others), economic burden, health burden and interaction burden (perceptions related to the value of interacting with the dependent elder). A cumulative score adding the responses from all twenty probes was developed to reflect a "frustration" measure.

Figures 8-1 through 8-6 summarize the mean scores where any statistical differences are noted. Age of the caregiver significantly impacts perceptions of burden for four of the five measures (Figure 8-1). On each measure, the oldest caregivers (75 or older) report the lowest mean scores for perceptions of burden. Highest levels of burden are consistently reported by the 65 to 74 group. No statistical differences are noted for economic burden among the four age categories. Mean scores for the caregivers younger than 65 are almost identical for both subcategories.

These patterns generate interest in the two oldest cohorts of caregivers and raise the question of why these two groups would report opposite trends. Intuitively, one would perhaps predict that younger caregivers, many of whom are still employed full-time and part of the "sandwich generation" since they are often children of dependent elders would report the highest levels of burden or frustration. However, the highest levels of burden and frustration are reported by the "young-old' or "transitional old" group. A large majority of these individuals are already retired, and almost all are spouses of the dependent elder. However, more than 90% of the 75 or older caregivers are also spouses of the dependent caregiver. Two possible explanations for this trend may be posed. The first is that high levels of frustration are temporal in nature and the young-old caregiver (all spouses) may be in the earlier stages of caregiving responsibilities while the older caregivers may have been performing this role for longer periods of time. A second possibility is that older caregivers may be somewhat impaired themselves, therefore lowering their expectations about interactions outside the home. In other words, the opportunity costs for caregiving activities may be lower for this group than

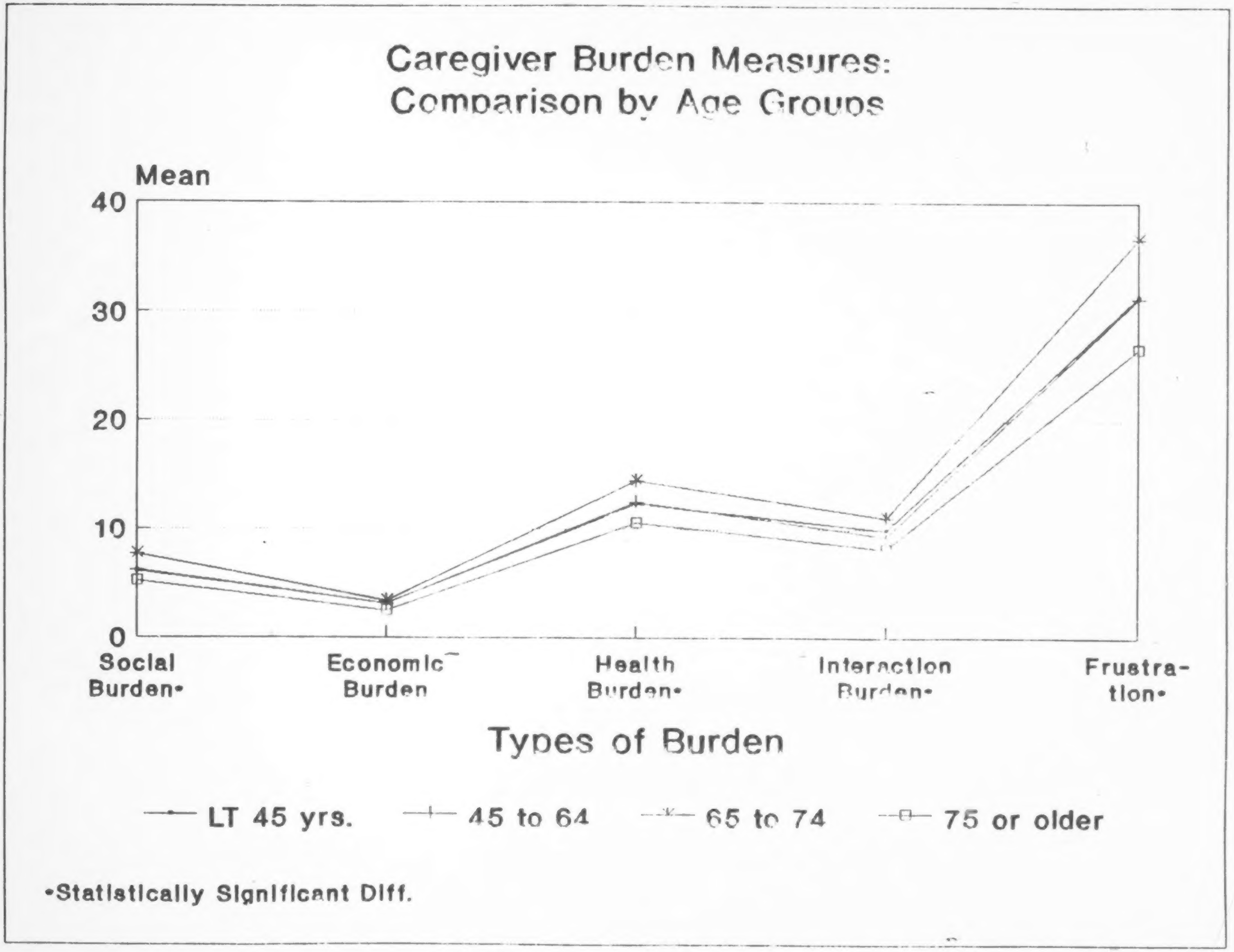
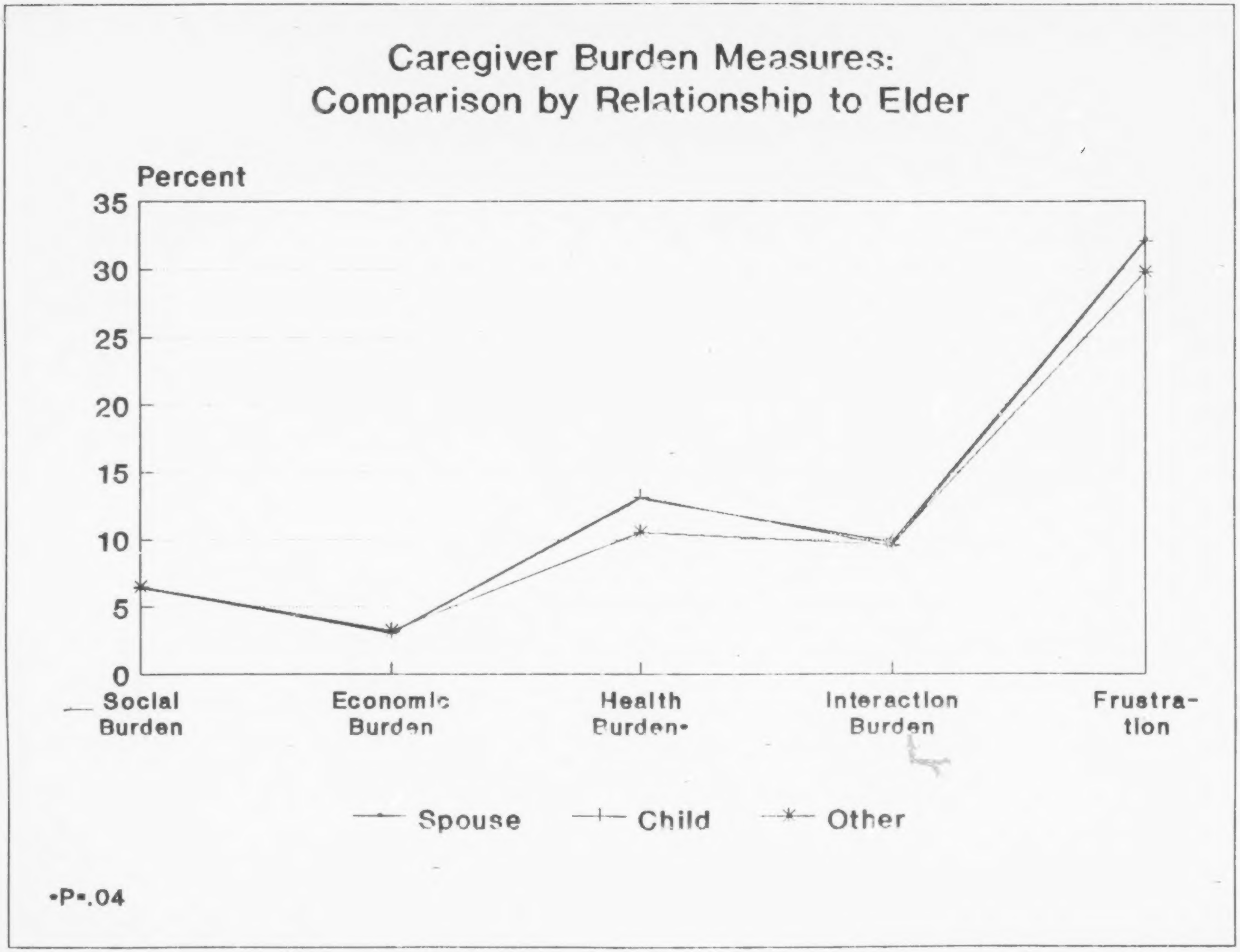

Caregiver Burden Measures:
Comparison by Age Groups
Mean
40
30
20
10
0
Social Burden•
Economic Burden
Health Burden•
Interaction Burden•
Frustration•
Types of Burden
LT 45 yrs.
45 to 64
65 to 74
75 or older
•Statistically Significant Diff.

Figure 8-1


Caregiver Burden Measures:
Comparison by Relationship to Elder

•P=.04

Figure 8-2

for the young old caregivers. This study cannot address the first possibility since no question was asked concerning length of time the caregiving activities had been provided. All caregivers had been providing services for a minimum of 10 to 12 months, but no measure exists for length of time each caregiver had been providing services.

Figure 8-2 illustrates the differences noted based upon relationship of caregiver to dependent elder. The only significant difference is noted for health burden with spouses and children reporting almost identical levels of burden and other caregivers substantially lower (P=.04). The average scores for each measure are almost identical on all other composite burden variables.

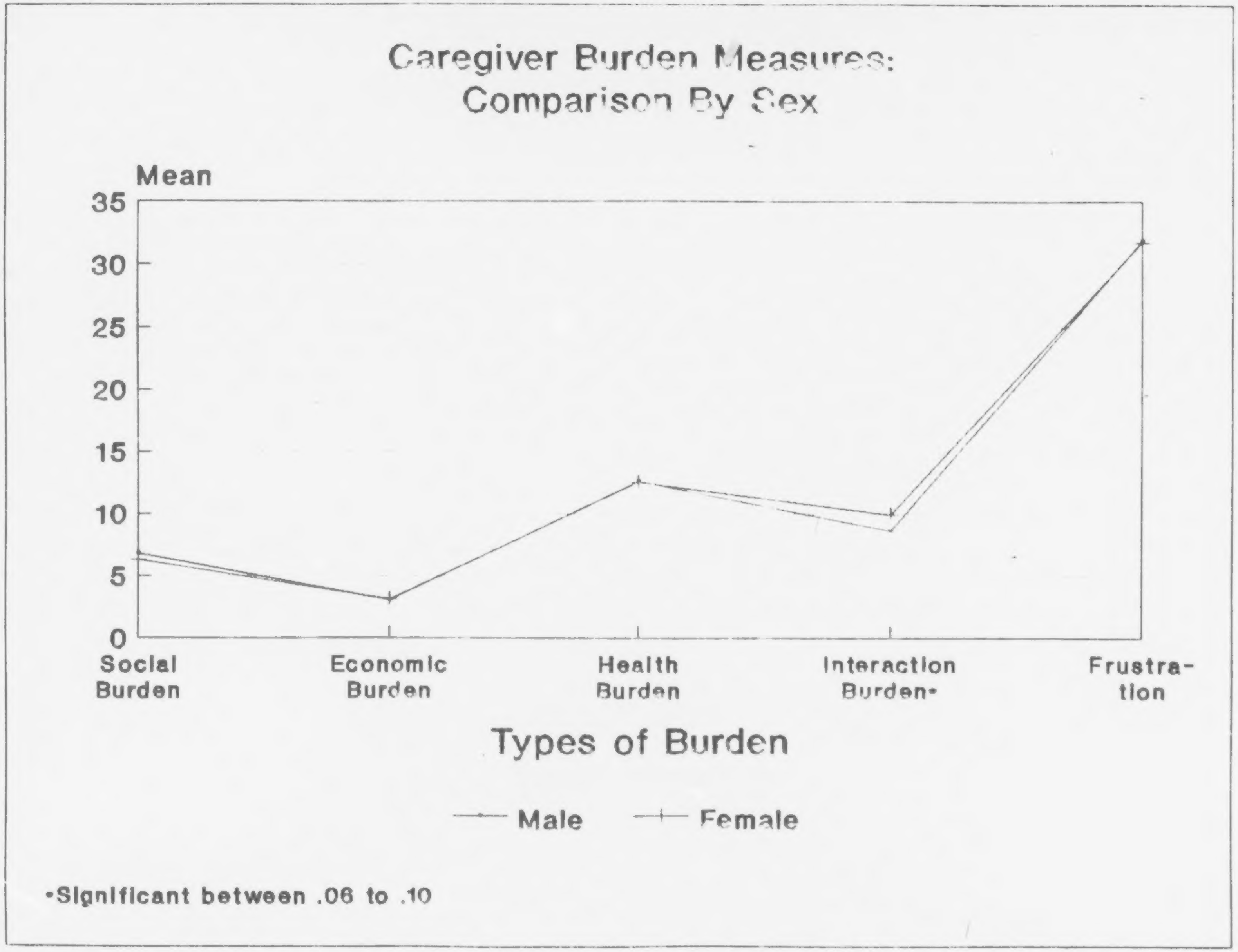
Male and female caregivers report almost identical levels of burden on each of the composite variables (Figure 8-3). On probes measuring interaction burden, differences between males and females approach significance with females scoring higher (P=.09) than male caregivers.

Racial characteristics significantly impacted perception of social burden with white caregivers higher than non-white caregivers. Differences approaching significance are noted for health burden and composite level of frustration, and, in both cases, white caregivers report higher levels of burden (Figure 8-4).

Level of educational attainment of the caregiver influences four of the five measures. In each case, caregivers with the highest level of education report higher perceptions of burden. Differences are statistically significant for social burden, and approach significance for economic burden, health burden and frustration (Figure 8-5).

Employment status of the caregiver influences one of the composite burden measures. Caregivers who are employed full-time report the lowest levels of interaction burden, and caregivers who work part-time or who do not work in order to care for the dependent report the highest levels of interaction burden. With one exception, the full-time employed caregiver reports the lowest levels of burden on each variable (Figure 8-6).

Caregivers who live with the dependent elder also report more burden on interaction than do those who do not live with the elder (Figure 8-7). Place of residence does not impact any of the other measures.



Caregiver Burden Measures: Comparison By Sex

*Significant between .06 to .10

Figure 8-3

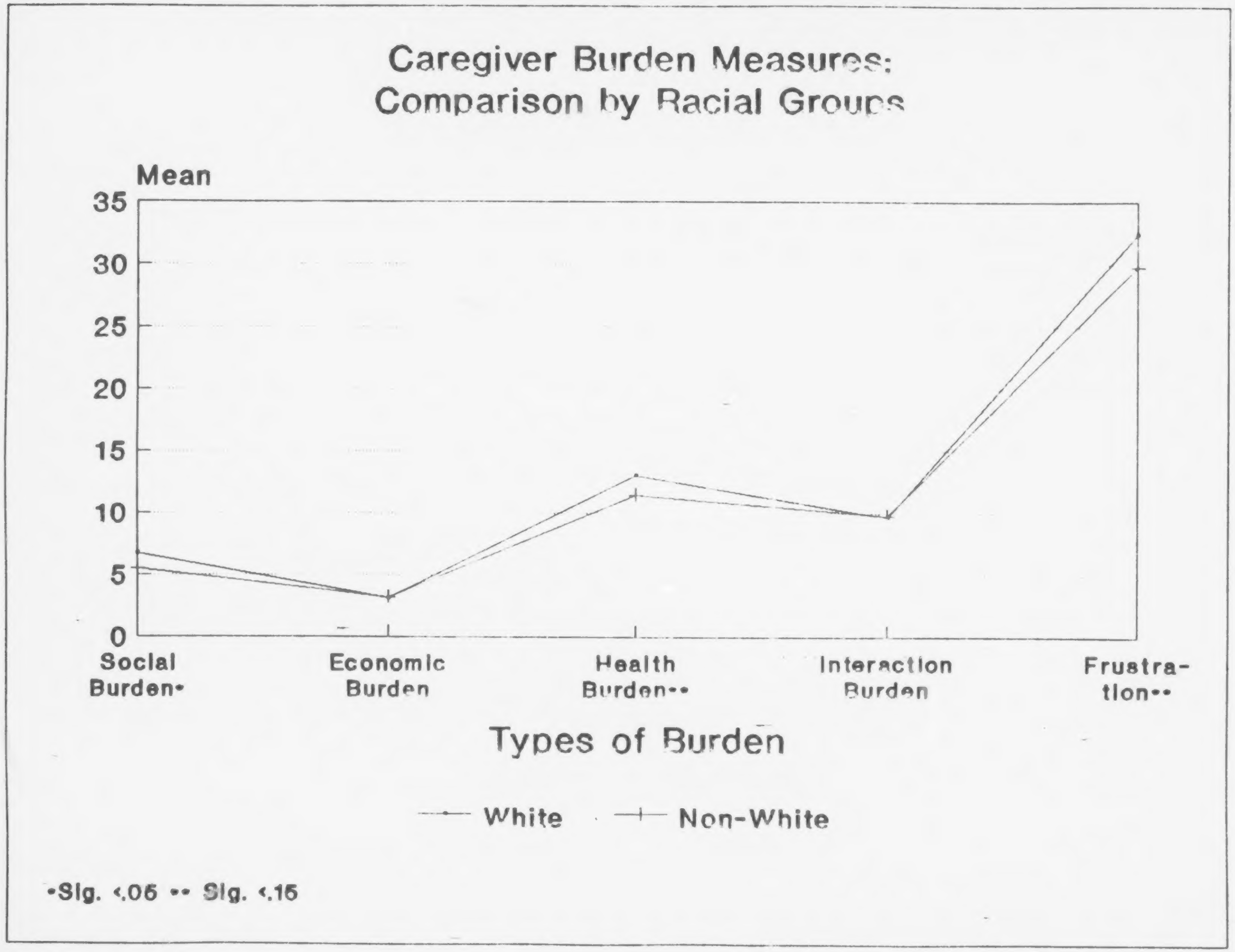

Caregiver Burden Measures: Comparison by Racial Groups

Figure 8-4

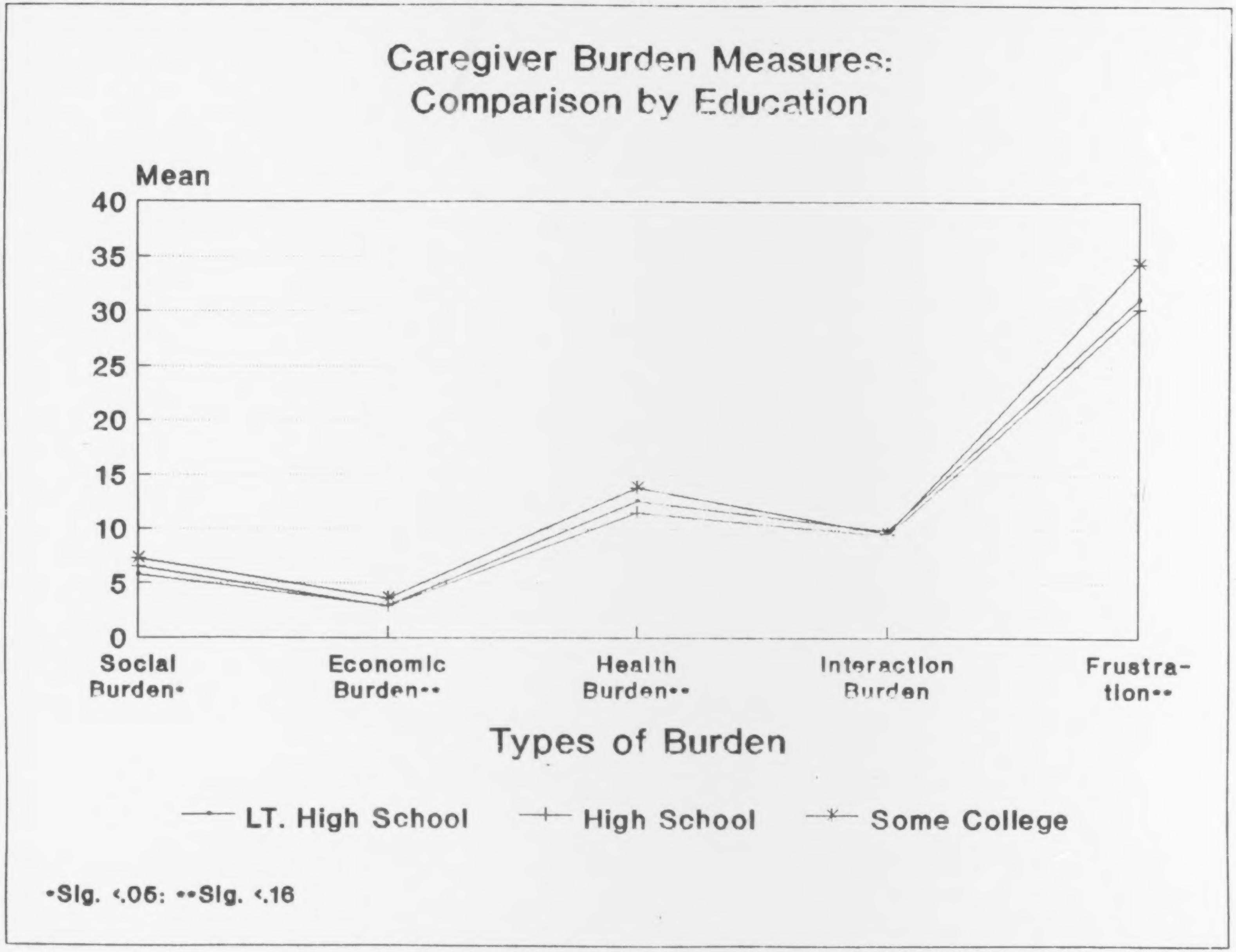
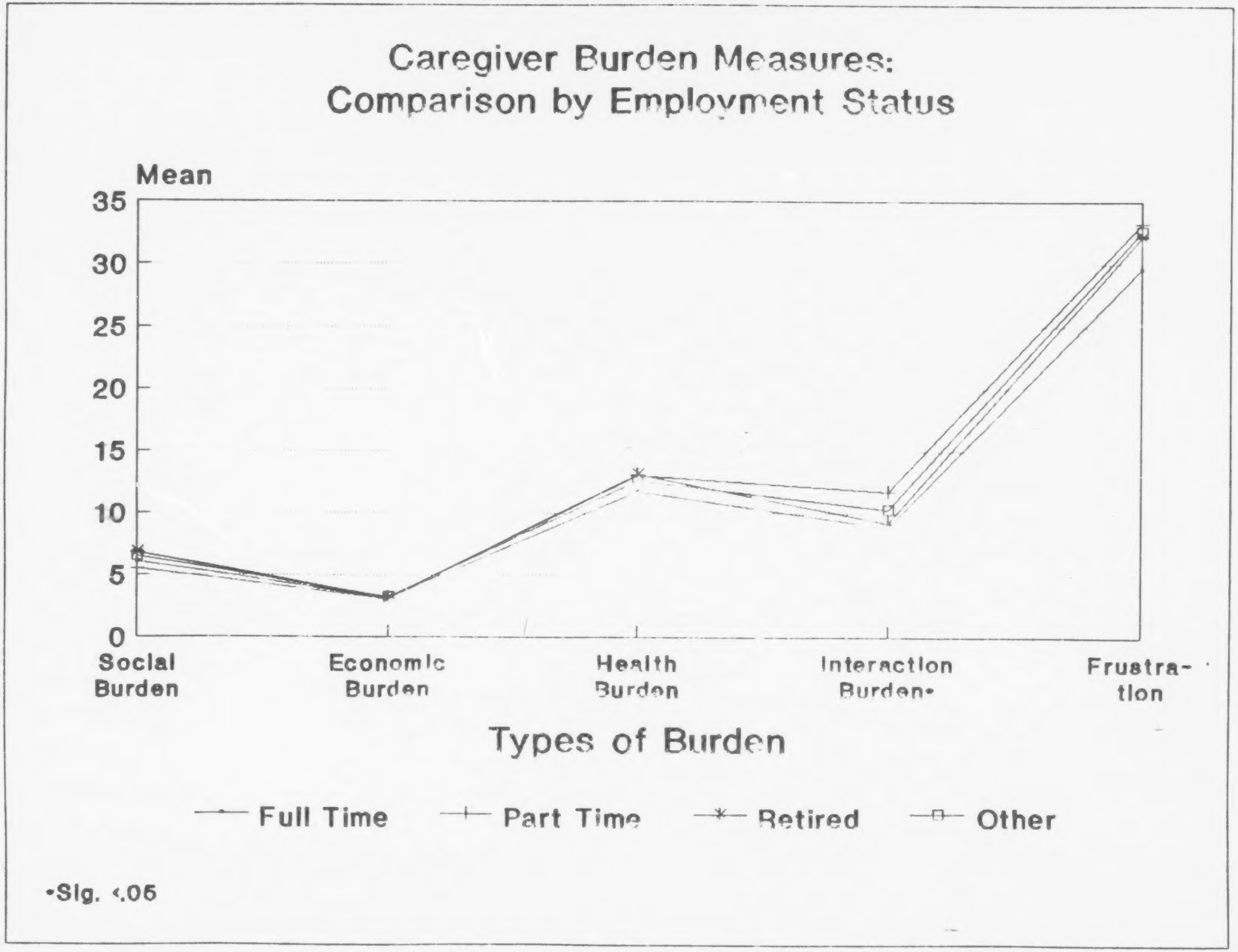

Caregiver Burden Measures:
Comparison by Education
Mean
40
35
30
25
20
15
10
5
0
Social Burden*
Economic Burden**
Health Burden**
Interaction Burden
Frustration**
Types of Burden
LT. High School
High School
Some College
*Sig. <.05: **Sig. <.16

Figure 8-5



Caregiver Burden Measures:
Comparison by Employment Status

*Sig. <.05

Figure 8-6

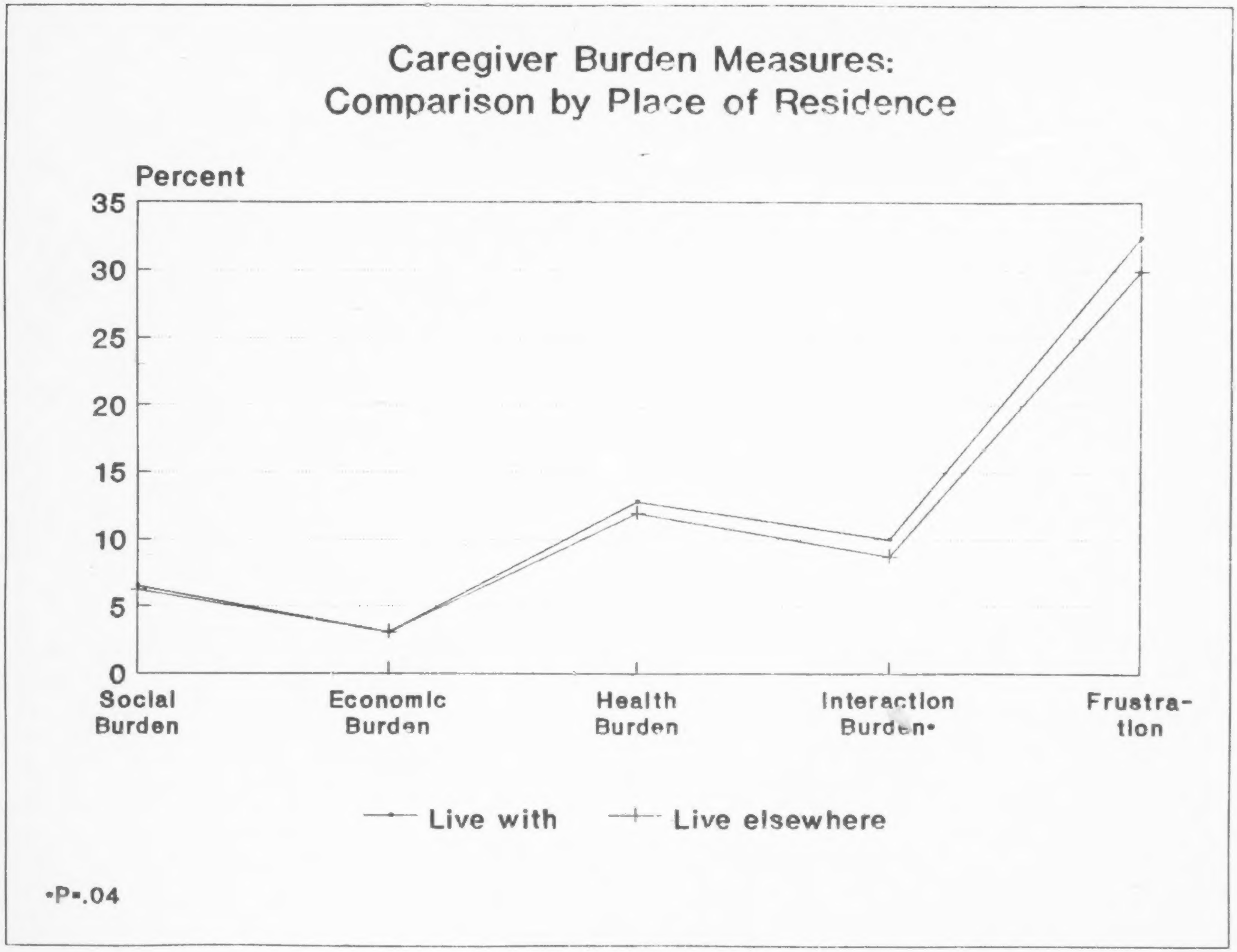

Caregiver Burden Measures:
Comparison by Place of Residence
Percent
35
30
25
20
15
10
5
0
Social Burden
Economic Burden
Health Burden
Interaction Burden*
Frustration
Live with
Live elsewhere
*P=.04

Figure 8-7

In Table 8-2, the impact on caregiving burden of the relationship of the caregiver controlling for sex of caregiver is reported. No substantial variations are noted between males and females within each relationship category. The small number of male caregivers in the other category makes statistical comparisons risky. In descriptive terms only, these findings appear to suggest few differences between men and women as caregivers, and only marginal differences among caregivers by type of relationship. "Other" caregivers tend to report the lowest levels of burden, but they are also the most likely to be full-time employed and younger, implying fewer opportunity costs.

When examining the impact of career history on the perceptions of burdens, significant differences are found for one type of burden, and several differences which approach significance are noted (Table 8-3). Caregivers who are currently thinking about retiring or quitting their job report a significantly higher level of health burden than others. Perceptions of social burden and overall level of frustration are also higher for this group than the other group, and these differences approach significance (P=.06). Caregivers who take vacation, sick leave or reduce their work hours to care the elder report higher levels of social burden than those who do not take these options (P=.07). For caregivers who did retire early or quit their job, the overall level of frustration approaches significance (P=.10) as does the perception of social burden (P=.12).

One particularly interesting comparison of caregivers has been published by Elaine Brody and others (1987) describing a typology of female caregivers which categorizes them in terms of the impact of caregiving on their careers. This typology is one which begins to address the concept of opportunity costs. A four category typology was developed defining female caregivers (providing care to their mothers) in the following ways:

> **The traditional group:** women who were not working at the time of the study and had not been working when the need for parent care arose.
>
> **The quit work group:** women who were not working at the time of the study because they had left the labor force to take care of their mothers.
>
> **The conflicted group:** women who were working at the time of the study but who were considering quitting their jobs or who had already reduced their work schedules because of their mothers' needs for help.

TABLE 8-2

CAREGIVER BURDEN BY RELATIONSHIP BY SEX OF CAREGIVER

Type	Mean	Spouse		Child		Other	
		Male	Female	Male	Female	Male	Female
Social Burden	6.4	6.8	6.1	7.3	6.3	5.8	6.6
Economic Burden	3.1	3.1	2.9	3.0	3.2	2.8	3.3
Health Burden*	12.6	13.0	13.0	13.1	13.1	9.0	10.7
Interaction Burden	9.6	9.1	10.2	8.6	9.6	7.5	10.0
Frustration	31.7	32.1	32.2	32.0	32.1	25.0	30.5

---

*P=.04

Table 8-3

FEMALE CAREGIVER TYPOLOGY BY DEMOGRAPHIC CHARACTERISTICS

		Typology			
Characteristic	Sample Mean	Traditional	Quit Work	Conflicted	Presevering
Sample Char.		45.9	19.3	24.8	10.1
Age					
LT 45	22.9	24.0	14.3	25.9	27.3
45 to 64	56.0	46.0	57.1	70.4	63.6
65 to 74	16.5	20.0	28.6	3.7	9.1
75+	4.6	10.	----	----	
	100.0				
Race					
White	68.8	74.0	57.1	77.8	45.5
Non-White	31.2	26.0	42.9	22.2	54.5
Marital Status					
Never Married	11.0	14.0	14.3	----	18.2
Married	70.6	68.0	57.1	88.9	63.6
Other	18.3	18.0	28.6	11.1	18.2
Education					
LT High School	40.4	48.0	42.9	22.2	45.4
High School	33.0	24.0	38.1	44.4	36.4
Post H-S	26.2	28.0	19.0	33.3	18.2
Relation					
Spouse	29.4	36.0	28.6	18.5	27.3
Child	50.5	44.0	52.4	63.0	45.5
Other	20.2	20.0	19.0	18.5	27.3
Live with Elder					
Yes	67.6	84.0	71.4	42.3	45.5
No	32.4	16.0	28.6	57.5	54.5
Health Evaluation					
Excellent	18.3	24.0	14.3	14.8	9.1
Good	42.2	30.0	47.6	59.3	45.5
Average	12.8	18.0	4.8	7.4	18.2
Fair	22.9	22.0	33.3	18.5	18.2
Poor	3.7	6.0	----	----	9.1

The persevering group: women who were working at the time of the study and had not considered reducing their working hours or quitting their jobs.

Questions were designed in this study to permit a similar typology to be developed for all caregivers. Because of the small number of male caregivers identified, the typology excludes male caregivers. The female caregivers described in this section of the report include those who are providing caregiving to any dependent elder and thus, do not focus solely on mother-daughter exchange relationships.

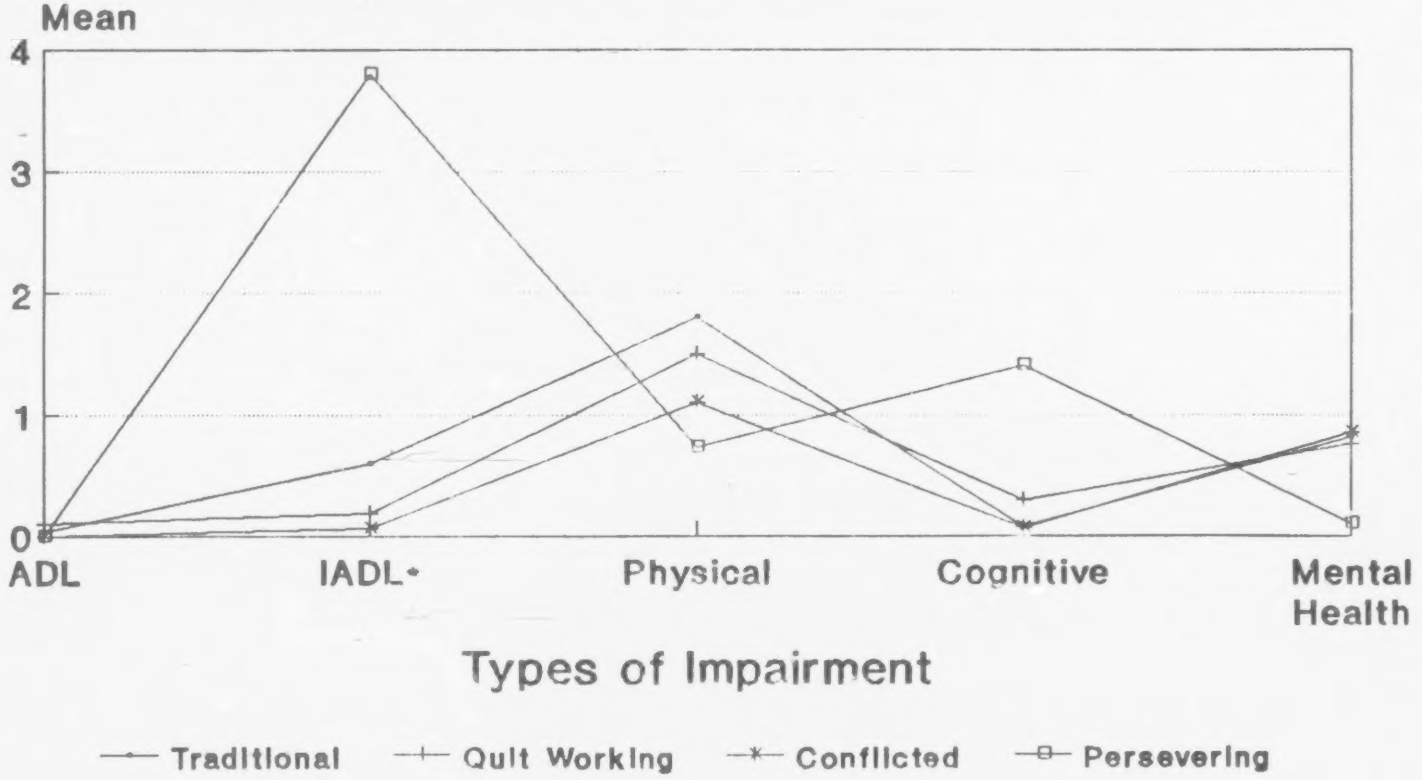
Of the female caregivers in Arkansas, 45.9% are traditional, 19.3% quit work to care for the elder, 24.8% are "conflicted" and 10.1% are persevering (Table 8-3). This random sample of Arkansas caregivers consists of more traditional females and fewer persevering female caregivers than the Philadelphia sample which was not random. The only demographic characteristic which significantly differs for this typology is place of residence of caregiver. A large majority of traditional caregivers live with the dependent elder as do almost three-fourths of the quit work group. Less than half the conflicted and persevering groups live with the elder (P=.004). The traditional and quit work groups are also older than the conflicted and persevering groups (P=.12). More than half of the persevering group are non-white, and two-fifths of the quit work group are non-white (P=.12).

The persevering females report a significantly higher number of impairments in IADLs than the other types. No other significant differences are noted (Figure 8-8).

An examination of perceptions of burden, however, does identify some differences among the four groups which approach significance. For the composite variables of social burden, health burden, and frustration, persevering caregivers report the lowest mean scores of burden (P=.11). Those who quit working to care for the dependent elder generally rank highest among the four groups, and the conflicted group ranks second in three comparisons which approach statistical significance. The small size of this sample requires very large differences to obtain a statistically significant score. This variation which approaches significance may offer a level of support for the idea of "opportunity costs" and their relationship to caregiver stress (Figure 8-9).

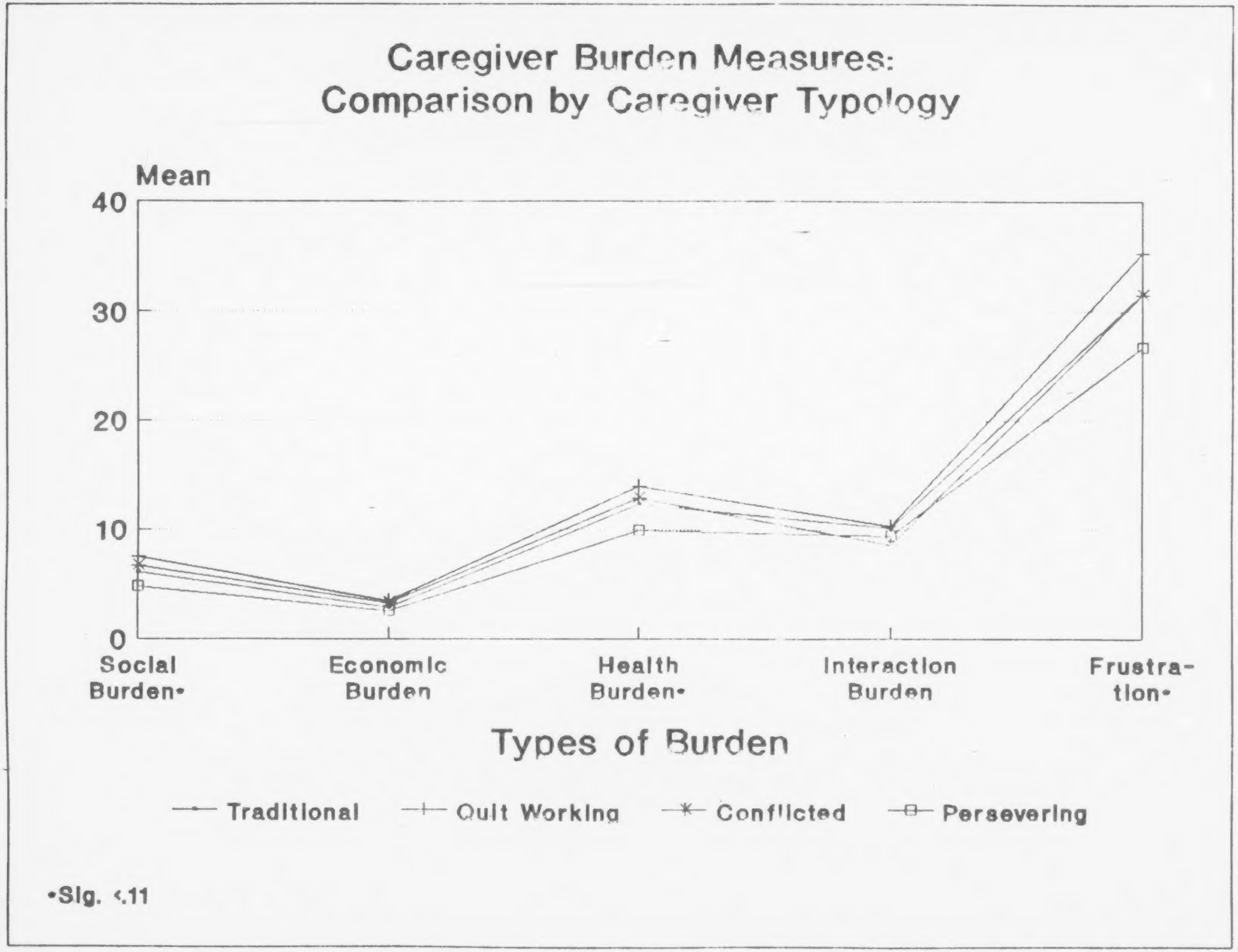
Caregiver Impairment

Comparison by Caregiver Typology



•Sig. <.01

Figure 8-8



Caregiver Burden Measures:
Comparison by Caregiver Typology

•Sig. <.11

Figure 8-9

From a policy perspective, one would assume that further attention needs to be directed to offering the types of services for caregivers which would enable those who want to do so to continue in the workforce while caring for the dependent elder. The kinds of services which best provide this sort of support to the caregiver are not well understood by this group of respondents. In Chapter __, caregivers reported no reliance upon adult day care or caregiver support groups, and less than 2% utilized respite care. These kinds of services also were more frequently described either as not available or the caregiver was unaware of their availability.

CHAPTER 9.0
OPTIONS AND ALTERNATIVES

In planning for the effective and efficient delivery of services to Arkansas elders represented by this dependent sample, a major concern focuses on the ongoing availability of informal care sources. As has been demonstrated in this sample, these primary caregivers play a critical role in service provision and thus in the ability for the dependent elder to avoid or postpone institutionalization. The ability of the elder to obtain other informal assistance or purchase formal assistance if his/her primary caregiver is unable to continue providing care becomes a critical concern.

Caregivers in this study were asked if another relative or friend could take over caregiving responsibilities if he/she could no longer perform this role. Almost half, 47%, indicate that no one else could take over or they don't know if someone else would take over. Among the remaining 53%, a substantial majority, 63.5%, indicate that caregiving responsibility would transfer to a child of the dependent elder. Less than 3% would transfer to a spouse, 29.4% would transfer to an "other" family member or friend, and 4.7% would utilize a formal provider. Table 9-1 summarizes the responses by salient demographic characteristics. Significant differences are noted based on age and marital status of caregiver. Youngest caregivers are most likely to indicate responsibilities would transfer to a child of the elder. A majority of the 45 to 64 aged group indicate that "other" informal sources would assume the caregiving role. For the 65 to 74 age group, a majority would transfer responsibility to a child. Among the oldest caregivers, almost all indicated responsibility would transfer to a child. Among the married and never married caregivers, transfer of responsibility to a child was the predominant pattern. For those in the "other" category (separated, divorced, or widowed), one-third report that children of the dependent elder would assume the primary caregiving role, but the majority report transfer of responsibility to other informal sources.

Caregivers were next asked if no other family sources could help and they could no longer perform the caregiving role, whether they would consider an option such as a nursing home, group living facility with medical care or some other formal agency or organization. A majority, 57.4%, indicate they would consider one of these options. Slightly more than 35% report definitive "no's," and 7.4% are undecided.

Table 9-1

WHO WOULD ASSUME RESPONSIBILITY IF CURRENT CAREGIVER COULD NOT

	Spouse	Child	Other Informal	Formal	Signif
Caregiver Sex					
Male	-	76.2	23.8	-	.40
Female	3.1	59.4	31.3	6.3	
Caregiver Age					
LT 45	3.1	75.0	15.6	6.3	.03
45 to 64	-	45.2	51.6	3.2	
65 to 74	-	61.5	30.8	7.7	
75+	11.1	88.9	-	-	
Race					
White	3.6	69.1	25.5	1.8	.14
Non-White	-	53.3	36.7	10.0	
Caregiver Education					
LT High School	3.1	56.3	37.5	3.1	.59
High School	3.6	75.0	17.9	3.6	
Some College/Grad.	-	60.0	32.0	8.0	
Caregiver Relation					
Spouse	-	76.2	19.0	4.8	.41
Child	2.2	66.7	26.7	4.4	
Other	5.3	42.1	47.4	5.3	
Caregiver Employment					
Full-time	-	54.5	36.4	9.1	.30
Part-time	-	40.0	40.0	20.0	
Retired	5.3	73.7	21.1	-	
Unemployed Health/Caregiving	3.6	71.4	25.0	-	

	Spouse	Child	Other Informal	Formal	Signif
Caregiver Residence					
Live with Elder	1.8	60.7	35.7	1.8	.40
Live Elsewhere	3.6	67.9	17.9	10.7	
Caregiver Marital Status					
Never Married	-	64.7	23.5	11.8	.006
Married	-	71.7	24.5	3.8	
Other	13.3	33.3	53.3	-	

Table 9-2 reports the differences by demographic categories. Significant differences are noted by race and educational level of the caregiver. Whites are substantially more likely than non-whites to consider one of the formal options described. Willingness to consider one of these formal options increases with higher levels of educational attainment. Differences approaching significance are noted for caregiver employment categories with full-time and part-time workers more likely to reject a formal option than retired or unemployed caregivers. Differences among caregivers by age also approach significance with a majority of the youngest caregivers rejecting the formal options mentioned.

Finally, those caregivers who would consider a formal option, 57%, were asked which option they would prefer. Almost half, 47.9%, select nursing home as their preferred choice; 16.7% select group homes; 10.4% prefer other formal arrangements; and one-quarter do not know what their choice would be. Table 9-3 summarizes the choice pattern by demographic grouping. No statistically significant differences are found among the categories. Differences approach significance based on place of residence and sex of caregiver. More than half the caregivers who live with the elder would choose a nursing home, and caregivers residing apart from the elder are more likely to choose group living, 38.9% than any of the other options (P=.06).

Three-fifths of the male caregivers would select a nursing home, but only slightly more than two-fifths of the females favor this option. More than one-fifth of the females prefer a group-living option for the dependent elder (P=.08).

Table 9-2

WOULD CONSIDER USING FORMAL AGENCY/INSTITUTION IF FAMILY UNABLE TO CARE FOR ELDER

Characteristic	Yes	No	Don't Know	Signif.
Caregiver Sex				
Male	65.8%	26.3%	7.9%	.42
Female	54.8	37.9	7.3	
Caregiver Age				
Lt 45	38.5	56.4	5.1	.07
45 to 64	61.1	29.2	9.7	
65 to 74	70.0	23.3	6.7	
75+	61.9	33.3	4.8	
Elder Sex				
Male	59.3	32.2	8.5	.80
Female	56.3	36.9	6.8	
Elder Age				
55 to 64	42.3	42.3	15.4	.15
65 to 74	51.2	46.5	2.3	
75 to 84	66.7	26.3	7.0	
85+	61.1	30.6	8.3	
Race				
White	65.5	26.7	7.8	.002
Non-white	37.0	56.5	6.5	

Table 9-2 Cont.

WOULD CONSIDER USING FORMAL AGENCY/INSTITUTION IF FAMILY UNABLE TO CARE FOR ELDER

	Yes	No	Don't Know	Signif.
Caregiver Education				
LT High School	44.4	44.4	11.1	.01
High School	62.7	35.3	2.0	
Some College/Grad.	74.4	17.9	7.7	
Caregiver Relation				
Spouse	65.0	26.7	8.3	.30
Child	56.9	36.1	6.9	
Other	43.3	50.0	6.7	
Caregiver Employment				
Full-time	52.4	45.2	2.4	.06
Part-time	27.3	45.5	27.3	
Retire	64.8	27.8	7.4	
Unemployed for health/caregiving	59.3	33.3	7.4	
Caregiver Residence				
Live with elder	61.7	31.7	6.7	.32
Live apart	43.9	46.3	9.8	
Caregiver Marital Status				
Never Married	39.1	52.2	8.7	.15
Married	63.7	29.2	7.1	
Other	46.2	46.2	7.7	

Table 9-3

	Alternatives Would Be Considered				
	Nursing Home	Group Living	Other Formal Agency/Institution	Don't Know	Significance
Caregiver Sex					
Male	60.0	--	12.0	28.0	.08
Female	43.7	22.5	9.9	23.9	
Caregiver Age					
LT 45	31.3	43.8	12.5	12.5	.11
45 to 64	50.0	13.0	6.5	30.4	
65 to 74	52.4	4.8	19.0	23.8	
75+	53.8	15.4	7.7	23.1	
Caregiver Race					
White	47.4	15.4	9.0	28.2	.40
Non-white	50.0	22.2	16.7	11.1	
Caregiver Education					
LT High School	60.0	8.6	8.6	22.9	.40
High School	50.0	18.8	6.3	25.0	
Some College/Grad.	31.0	24.1	17.2	27.6	
Caregiver Employment					
Full-time	30.4	26.1	13.0	30.4	.52
Part-time	66.7	--	--	33.3	
Retired	62.9	8.6	8.6	20.0	
Unemployed/Health or Caregiving	44.1	20.6	11.8	23.5	

Chapter 10.0

SUMMARY AND CONCLUSIONS

The Arkansas Caregiver Study (ACS), a part of the Arkansas Longitudinal Study on Health and Aging (ALSHA) collected data from primary caregivers of dependent elders concerning their own chronic health, functional impairments and service needs and the impact of caregiving on their employment, their economic status, and their mental health. These findings were compared with the 1982 National Long Term Care Survey (NLTCS), a nationally representative sample of more than 6,000 primary and secondary caregivers of dependent elderly.

To understand the needs and concerns of caregivers and the dependent elders they care for, it is useful to have a general picture of the population from which they are drawn. From the ALSHA, an analysis of the limitations in activities of daily living (ADLs) and instrumental activities of daily living (IADLs) and the related use of formal or informal services to assist them when they are unable to perform these activities indicates that:

*** Almost half have at least one ADL or IADL limitation, and 15% report four or more.**

*** Just over 7% are using at least one formal health or personal care service to address an ADL limitation.**

*** About 8.5% are using at least one or more informal sources, and 19.7% report at least one ADL limitation for which no formal or informal assistance is received.**

*** More than 20% are using at least one formal source of service assistance for an IADL impairment. More than 27% are using one or more informal sources and 14.7% report at least one IADL limitation for which neither formal nor informal assistance is received.**

In the general population of elders over 65, while many elders are independent and require little or no assistance, a substantial group receives assistance from family and friends, the informal network. Another group requires the assistance of an agency or service, the formal network. In addition a significant group of elders have limitations that could be assisted, but for a variety of reasons they are not receiving any assistance either informal or formal.

From an unduplicated list of 1504 households with an elder who either received more than weekly assistance with one or more ADLs or IADLs or was frequently or constantly restricted by one or more chronic health problems, 364 potential caregiving relationships were found.

From this group, 15% refused to participate; the whereabouts of the elder could not be determined in 4.4% of the households; an additional 4.4% had moved out of state since the first interview; 8% had died; 8.6% did not consider themselves caregivers because the services they performed were returned in some way by the dependent elder; and 11% indicated that their caregiving responsibilities had terminated as the dependent elder had improved. A small percentage of others did not participate for a variety of reasons, leaving 164 randomly selected households which met this study's criteria for caregiving and where the caregiver agreed with the study author's guidelines that caregiving was taking place.

What, then, can we learn from these Arkansas caregivers and the dependent elders they care for?

*** Caregivers reflect similar demographic characteristics to those identified for primary caregivers in the NLTCS.**

*** Almost three-quarters, 73.8%, of Arkansas caregivers live with the dependent elder for whom they care.**

*** Caregiver responsibility is most likely to be performed by children of the dependent elder, 43.9%. Almost 38% are spouses, and 18% are some other relation, usually daughters-in-law or granddaughters. Of the child caregivers, almost 85% are daughters.**

*** Of Arkansas caregivers, 26% are employed full time, 7.3% work outside the home part-time, 33.5%are retired and 32.6% indicate they do not work in order to care for dependent elders or because of their own health problems.**

*** Of caregivers who are spouses, nearly 30% are 75 years or older; 44% are between 65-74 in age.**

*** Caregivers who are children or 'other', are generally younger than 65, with well over half between the ages of 45-65 and almost two-fifths younger than 45.**

*** In each category of caregivers, women were performing the majority of caregiving functions. More than one third of the children and 'other' caregivers work full-time; a majority of primary caregivers who are children are married 56.9%; almost half of the 'other' group are non-white.**

Who are the Dependent Elders?

*** Almost 16% are age 55-64;**

*** 26.8% are 65-74;**

*** 34.8% are 75-84;**

*** 22.6% are 85+.**

***In the NLTCS study, no respondents were younger than 65, and the composition of the older cohorts is very similar to Arkansas. Just over 21% were 85 or older and 35.2% were between 75 and 84 years.**

***In Arkansas, 63.4% of the dependent elders are women, 36.6% are men.**

What is the health status of the dependent elders?

The presence of limitations in activities of daily living (ADLS) and instrumental activities of daily living (IADLS) are generally considered to be the best predictors of nursing home admissions and of use of community-based services. As elders become more limited in these areas, they and their families begin to seek assistance to enable the elder to remain independent at home as long as possible.

A comparison of the dependent elders with the general sample of Arkansas elders from the ALSHA shows the dependent elders to be a highly impaired group. More than half the dependent elders are limited in bathing and shampooing, 53%; and 51.2% are limited in their ability to walk or get around without assistance. Eleven percent (11%) have difficulty feeding themselves, usually the last of the basic ADL functions to show limitations. In comparison, only 1% of the general sample indicated such difficulty.

IADL limitations show extremely high levels of dependence. As was true for the general sample, more elders report difficulty doing yard work or heavy cleaning than other chores, but among the dependent sample, the prevalence rate, 93.3%, is about three times higher than the general sample. Almost 90% have difficulties doing light housework and shopping, 75% have difficulties doing laundry and cooking, more than half report problems managing their own business affairs, and 40% report difficulties managing their own medication.

These levels of impairment reflect the low levels of health status reported. Almost 70% of the dependent elders are described as in fair or poor health with 40.2% described in poor health.

What are the patterns of helping for Arkansas caregivers?

From national studies, we know that informal caregivers are more likely to provide assistance with instrumental activities of daily living (IADL) than with basic ADL activities (Burwell, 1986). In a study by Branch and Jette, 86% of the elderly who received assistance in IADL activities relied solely on informal caregivers that is, family and friends. As elders become more functionally limited, the reliance on formal service providers increases. Among persons receiving basic ADL services, 50% relied solely on informal caregivers, 38% relied on formal service providers, and 12% relied on a combination of formal and informal sources of assistance (Branch and Jette, 1983).

In Arkansas, the highest prevalence levels for ADL limitations are for difficulties bathing and shampooing and in walking without assistance of a cane, crutch, wheelchair or help from another person. One fifth (20%) receive help from a source other than the primary caregiver for bathing/shampooing, and 3.2% of the caregivers indicate that more help is needed. More than two-fifths of the dependent elders, 43.9%, have difficulties with dressing/grooming, and more than 20% of the dependent elders have difficulty transferring to the toilet; 25% have problems with bowel and bladder accidents. The estimates of need for additional assistance in addition to the caregiver help, are lower for Arkansas than for those reported in the NLTCS study. In that study, 5% of the elderly who have functional impairments and are assisted by a caregiver need more assistance. For each of these difficulties, Arkansas caregivers report lower needs for additional help.

Arkansas' perception of additional needs in the area of IADL tasks is also much lower than for the national sample. From the NLTCS, 36% of dependent elders had unmet needs for IADL assistance. Arkansas' figures are much lower.

For dependent elders, the cluster of IADL difficulties providing the most problems follows the pattern established in other studies. Difficulties with heavy cleaning and yard work is reported by 93% of the elders and almost 29% of the primary caregivers. Light housekeeping, shopping, laundry and cooking are high problem areas where caregivers report providing a large amount of assistance.

Even with caregiver support, outside assistance is used for a significant amount of the tasks. Assistance with managing medication, and managing business affairs are also provided by a very large percentage of caregivers.

When additional help is sought beyond the primary caregiver, the source is more likely to be formal for ADL difficulties than for IADL problems. Although the actual percentages of use of assistance in addition to that provided by the primary caregiver is low, when help is sought, the formal sector is accessed for ADL problems.

Even though the use of additional help is higher for IADL difficulties than ADL problems, the use of the formal sector is less pronounced.

What do we know about the health of the caregiver?

* Age of the caregiver is significantly related to self reported health status.

* The age group with the most negative health evaluations is not the oldest group, but the 65-74 year old caregivers.

* Male caregivers are also more likely to report poor health than female caregivers.

* Advanced education is positively related to perceptions of health with almost half of those caregivers with some college education reporting excellent health. Caregivers who have never married report substantially more positive health perceptions than do either married caregivers or caregivers who are either separated, divorced or widowed.

* Although ADL/IADL limitations are relatively low among the caregivers in this study, the presence of chronic health problems is apparent.

* Caregivers who are spouses, who are older and who have less education, are more likely to have poorer health and be at risk for IADL/ADL impairments themselves.

What is the role of the formal service sector?

* Male caregivers are significantly more likely to report formal service utilization for their dependent elder than are female caregivers.

* Formal services are more often used for female dependent elders.

* Older caregivers rely most heavily on formal services for the dependent elder.

* In this sample reliance on formal services is virtually identical for Medicaid and non-Medicaid households.

*** Use of in-home chore services linked to specific IADL impairments in the dependent elder is more often impacted significantly by demographic characteristics than is true for home health and personal care services. Age of the caregiver significantly impacts use with older caregivers reporting the highest mean utilization. Male caregivers are significantly more likely to utilize formal services for the dependent elder than are female caregivers, and full-time employed caregivers are more likely to use formal assistance than are part-time or 'other' categories.**

What do caregivers know about the availability of services?

*** Fewer than 14% do not know the availability of meals at senior centers;**

***About 16% do not know about visiting nurse or therapy services;**

***17% do not know about home delivered meals.**

Unfamiliarity with availability of a service appears to be a major problem for many caregivers: 75% do not know about caregiver support groups; 39.5 % either do not know or think home delivered meals are not available; 59.9% do not know, or think case management is not available. Services most likely to be named as not available are adult day care 34%, respite care 30% and telephone reassurance, 30% .

What are some of the economic issues of caregiving?

*** Caregiving households most likely to receive Medicaid assistance were significantly more likely to be non-white than white; the caregiver in these households is most likely to be a child of the dependent elder and least likely to be a spouse; the caregiver is more likely to live apart from the elder than with him/her; and he/she is more likely to be employed full-time and least likely to be retired.**

*** The use of services is virtually identical in Medicaid and non-Medicaid households. Given the findings on employment patterns and living with or apart from the dependent elder, it appears that availability of Medicaid support for some formal service assistance may enable more caregivers to remain in the workforce and may even encourage independent living for the elder.**

*** Slightly more than half the sample were working outside the home when the elder first required care.**

*** In the employed or previously employed group, almost half, 46.2%, have reduced employment hours, taken sick leave or vacation to care for the elder. More than one-third retired early or quit; an additional one-third, 32.1%, are considering retiring early, quitting their job or reducing hours to care for the dependent elder.**

*** The oldest caregivers were least likely of the age groups to have worked outside the home when the dependent elder's problems began. Caregivers age 45-64 are significantly more likely than other groups to reduce their work hours or take sick**

leave or vacation time to care for the elder. Caregivers 65-74 are more likely than others to be considering early retirement, quitting or reducing work hours to care for the elder. Females are significantly more likely than males to report early retirement or quitting or to be considering those options.

What options and alternatives do caregivers have?

* When asked if another relative or friend could take over caregiving responsibilities if the current caregiver could no longer perform this role, 47% indicated that no one else could, or they didn't know if someone could take over.

* Among the remaining 53%, a majority indicated that caregiving responsibility would transfer to a child of the dependent elder. Less than 3% would transfer to a spouse, 29.4% would transfer to an 'other' family member or friend.

* Significant differences are noted based on age and marital status of the caregiver. Youngest caregivers are most likely to indicate responsibilities would transfer to a child. A majority of the 45-64 age group indicate 'other' informal sources would assume the caregiving role; in the 65-74 age group a majority would transfer responsibility to a child. Among the oldest caregivers, almost all indicated responsibility would transfer to a child.

* Caregivers were asked if no other family sources could help and they could no longer perform the caregiving role, would they consider another option such as a nursing home, group living facility with medical care or some other formal agency or organization. More than 57% indicate they would consider one of these options. Slightly more than 35% report definitive "no's," and 7.4% are undecided.

Clearly, these findings from some of the most dependent households in the Arkansas sample indicate some important policy directions for consideration. These caregivers who are providing a large percentage of support for these very dependent elders are assuming these responsibilities with only moderate support from the formal sector. Although some formal service utilization is reported, the bulk of care is still provided within the family. More work needs to be done in marketing available support services and making caregivers aware of the kinds of services which are available to help them continue in their caregiving activities. Almost no differences are found in the Medicaid and non-Medicaid populations indicating that families who receive some government assistance do not abandon their responsibilities as caregivers.

The findings from this study may suggest other questions which should be addressed in further phases of this Arkansas Longitudinal Study. For example, caregiving patterns and perceptions of burden may differ in households where most assistance is in forms of IADL assistance. Many of these types of households were excluded from the sampling frame of this caregiver study due to the emphasis on ADL assistance. Later phases of the study may be able to broaden the information base for caregivers in Arkansas as they continue to be, both in this state in the nation, the major source of community based long term care.

REFERENCES

Brody, Elaine M., Morton H. Kleban, Pauline T. Johnson, Christine Hoffman, and Claire B. Schoonover. "Work Status and Parent Care: A Comparison of Four Groups of Women," **The Gerontologist**, Vol. 27, Number 2, April, 1987, pp. 201-208.

Harlow, Karen S., Myrna R. Pickard, Mark S. Rosentraub, and Laura B. Wilson. "Formal and Informal Health and Personal Care Services: Rural and Urban Comparisons from a National Panel Study," **Systems in Health-Social Services for the Elderly and Disabled.** Perth, Australia: SYSTED87, 1987.

Kane, Rosalie and Robert Kane. **Long Term Care: A Review of the Evidence.** Washington, D.C.: DHHS Grant No. 90-AR-0053, 1986.

Stone, Robyn, Gail Lee Cafferata and Judith Sangl, "Caregivers of the Frail Elderly: A National Profile," **The Gerontologist**, Vol 27, No. 5, October, 1987, pp. 616-626.

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AGING ARKANSAS:
FOCUS ON HOUSING

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INTRODUCTION

Arkansas ranks second in the nation in the percentage of elders in the population, and the needs of this group are of concern to state and local policy makers and planners. The population projections for the next several decades indicate dramatic increases in the numbers of elderly. From these projections come concerns for the provision of long term care in community settings for a population with declining functional abilities. While considerable attention has been devoted to determining demand for health services and to some extent social services, other aspects of community-based concerns have received little attention. For example, what role does housing play in meeting the needs of elderly? To answer this question, information about the current housing of Arkansas elders was needed.

METHODOLOGY

The Arkansas Longitudinal Study on Health and Aging (ALSHA) studied housing as part of its research on Arkansas elders, a joint project of the Arkansas Association of Area Agencies on Aging and the Division of Aging and Adult Services of the Arkansas Department of Human Services. No detailed studies of Arkansas elders' housing had ever been conducted. From the ALSHA data base of 6097 elders from 4015 households, 2000 elder households were randomly chosen to receive the Arkansas Housing Survey. Responses were received from 1355 or 68% of the households contacted. The responses were analyzed to determine any possible biases in the return pattern. The sample from the mail housing survey closely reflects the characteristics of the original sample in terms of income, education, and region. A very small weighting factor was applied to correct for a slight under-representation of minorities.

This report, organized into three sections, analyzes those responses. The first section provides an introduction to and background on housing issues and aging. The second section reports the findings of the Arkansas Housing Survey by topic area. The third section is a discussion of those findings. Tables of data by topic area follow the narrative.

HOUSING AS SOCIAL POLICY

For those who are responsible for policy development and implementation at national, state, and local levels of government, housing and aging are closely linked. The dramatic growth of the elderly population in recent decades, and the projections for increases as the "baby boomers" reach retirement age, are creating great interest in housing, because delivery of long term care relates closely to housing.

Traditionally, housing in the United States has developed along an unplanned model. Individual single family residences were built on individual lots with little concern for issues of community services other than utilities, police and fire protection, garbage collection, and snow removal. In recent years more interest in planned communities has developed, but the vast majority of housing in this country is not within planned communities.

As the population ages, planners are considering options for caring for large numbers of elderly. Major economic as well as social issues are involved. Housing which can meet the needs of elders who will experience diminishing functional abilities permits community based services, enhances independence, improves the quality of life, and provides less restrictive living environments. Most elderly choose to remain in their own homes as long as possible. Their home affects not only their health but also their economic, social, and psychological well-being. For many, their home represents their only valuable asset, symbolizes a lifetime's hard work, and saves valuable dollars in the monthly budget. Nationally, more than 70% of all housing units headed by elderly are owner occupied, and 85% of those have no mortgage outstanding (Lawton, Hoover, 1981).

Many elderly homeowners cannot afford to live anywhere else. Data from the 1979 Annual Housing Survey indicate that while half of all elderly renters spend 30% or more of their incomes for housing, only 38% of elderly homeowners with current mortgages and 14% of owners with paid up mortgages spend that much for their housing.

Evaluating housing for the elderly is difficult. What constitutes adequate housing varies by such individual circumstances as income level, household size and composition, and the health status of its members, as well as the condition of the housing stock itself. Those variables may change quickly for elderly. The death of a spouse, a reduction of functional abilities such as loss of mobility, significant changes in income level, or major housing problems can change the suitability of housing.

The adequacy of housing is generally measured by three factors that have traditionally been considered the most important. They are: incomplete plumbing (not having available one or more of hot and cold piped water, a tub or shower, and a toilet for the exclusive use of the household); overcrowding (more than one person per room); and dilapidated condition of the structure (holes, open cracks, rotted, loose, or missing materials over large areas of the foundation, outside walls, roof or inside walls, or substantial sagging of structural members). The flow of services within the structure is important. In addition to the presence of complete plumbing and heating, they must also work. Along with the number and size of rooms, their condition is important.

The most comprehensive assessment of housing condition available is data from the Annual Housing Survey (AHS), a survey of approximately 70,000 dwelling units conducted annually by the U.S. Department of Housing and Urban Development and the U.S. Bureau of the Census since 1973. Appendix A lists characteristics of elderly housing from the 1976 and 1979 Annual Housing Surveys and some data (not age specific) from the 1983 Annual Housing Survey for comparison to the Arkansas Housing Survey findings.

The Arkansas Housing Survey questions (Appendix B) covered housing physical conditions, issues of satisfaction, and asked about preferences if changes in housing would be necessary. The survey grouped questions into three areas: general housing issues, specific housing characteristics, and energy conservation, maintenance, and home safety measures. Within each area, topics are discussed by category, and responses are analyzed by age, race, income, ownership, and household size.

General housing issues, the first area, breaks down by housing type, household size, ownership, rating of housing physical condition, level of satisfaction with housing, judgement of financial ability to make repairs and improvements, housing choices if moving were necessary, need to sell home due to financial pressure, and interest in home sharing.

The second area organizes specific housing characteristics according to number of rooms, number of bedrooms, presence of indoor plumbing, presence of complete bathroom facilities, number and use of bathrooms, breakdown of flush toilet, presence of complete kitchen facilities, use of kitchen facilities, breakdown of running water, type of home heating, breakdown of heating, presence of air conditioning, housing problems of rodents, roof leaks, wall and ceiling cracks or holes, broken plaster, broken stairs or steps, and presence of concealed wiring.

The third area, energy conservation, maintenance, and home safety features, analyses features such as insulation, storm windows, termite contracts, smoke alarms, grab bars, stair rails, dead bolt locks, front door peep holes, burglar alarms, and security lights.

SURVEY FINDINGS

GENERAL HOUSING ISSUES

TYPE OF HOUSING: Tables 1 through 5 provide detailed responses by category. A house (a free standing, detached or semi-detached dwelling, not an apartment or mobile home) is the primary type of housing for elders regardless of age. While 95% of elders under sixty live in a house, only 84.4% of those over eighty do so. The oldest Arkansans are significantly more likely to live in an apartment or a boarding or group home than are elders who are younger. By race, more than 90% of all elders live in a house (90.5% of white elders, 94.6% of non-white elders) versus an apartment (4.2%, 2.2%) or a mobile home (4.2%, 0%).

For elders who own their residence, 94.3% own a house; 0.2% own an apartment; and 4.1% own a mobile home. For renters, 47.9% rent a house; 48.3% an apartment; 1% a mobile home.

At all income levels, a house is the major type of residence with apartments and mobile homes accounting for 1.7-5.9% of housing varying by level of income. Most elders regardless of household size live in houses. Of those who live alone, 86.4% live in a house; 7.2% in an apartment; 4.5% in a mobile home; and 2.9% in a group or boarding residence. The percentage of elders who live in a house is higher for households of two and three-or-more persons.

HOUSEHOLD SIZE: The relationship of age, race, and income to household size are discussed here. Tables 6 through 8 provide detailed responses by category. Household size is also a variable in each specific housing issue. Age is significantly related to household size. Younger elders are significantly less likely to live alone, older elders more likely to live alone. Similarly, younger age cohorts of elders are significantly more likely to live in two or three-or-more person households, older elders significantly less likely. Non-white elders are significantly more likely to live in three-or-more person households and less likely to live in two-person households than white elders.

OWNERSHIP: Tables 9 through 12 provide detailed responses by category. By age, 90.2% of all elders own their homes while 7.7% rent them. The oldest cohort, those over eighty, are significantly less likely to own their residence and are somewhat more likely to rent than elders of other age groups. The over-eighty age group is also somewhat more likely to live in a situation where they neither rent nor own their residence. These facts suggest an arrangement where they live with someone else or reside in a group residence. Just over 90.8% of white elders own their residences; 7.3% rent; and 2.0% have some other arrangement. Just under 87% of non-white elders own; 10.3% rent; and 2.8% have another arrangement for their residence.

Income affects ownership as one might expect. At an income level of less than $4,000, 80% own and 11% rent, while at an income level of $15,000, 94.5% own and 4.6% rent. Just over 96% of elders with incomes of $30,000 or more own their residence. For one-person households, 85.3% own; 12.6% rent; and 1.2% have another arrangement.

PHYSICAL CONDITION: Tables 13 through 17 provide detailed responses by category. The physical condition of an elder's home is significantly related to race, income, ownership, and household size. But for age alone no significant differences are noted. Thus, while race, income, the number living in the home, and whether the home is owned or rented have an effect on the physical condition, age of the elder does not. Just over 6% of white elders rate their housing's physical condition as very poor or poor, 28% rate it as fair, and 64.9% indicate good or very good physical condition. Non-white elders' rate their homes as : very poor or poor physical condition, 22.4%, fair, 35.5%, and good or very good physical condition, 42%.

One would expect that as income increases, ratings of very poor and poor physical condition decrease, and ratings of fair, good, and very good increase. The survey confirms that expectation. The level at which ratings of physical condition of very poor and poor drop below 10% and fair below 40% is an income level of just over $10,000. Elder home owners report fair or worse physical condition in their housing 37.3% of the time, and good or very good in 62.7%. Renters describe 32.4% of their housing as fair, very poor or poor, and 67.6% as good or very good. In both cases, housing conditions rated fair far exceed those rated poor.

For household size, almost 10% of those living alone rate the house's physical condition as poor or very poor. A higher percentage, 11.6% of three-or-more person households, have the same rating.

SATISFACTION: Tables 18 through 22 provide detailed responses by category. Satisfaction with housing does not appear to be related to the age of the elder alone. Other variables- race, income and ownership- are significantly related to levels of satisfaction. White elders indicate much higher levels of satisfaction and lower levels of dissatisfaction than non-white elders. Nearly 25% of non-white elders are very or sometimes dissatisfied versus 8.6% of white elders. Level of satisfaction differs significantly by race for the choices of very dissatisfied, sometimes dissatisfied and very satisfied. Almost 60% of non-white elders are satisfied or very satisfied compared with 86% of white elders.

Owners and renters have generally comparable levels of satisfaction. Owners are more likely than renters to be very satisfied. No significant differences are found for household size, with one-person households varying little from households of other sizes.

Satisfaction levels vary significantly by income: elders with lower incomes are significantly more likely to be very dissatisfied than those with higher incomes. At the other end of the income range, elders with higher incomes are significantly more likely to be very satisfied with their housing than elders with lower incomes.

FINANCIAL ABILITY TO MAKE REPAIRS AND IMPROVEMENTS: Tables 23 through 27 provide detailed responses by category. All categories-age, income, ownership, race, and household size-are significantly related to the financial ability to make repairs and improvements. Interestingly, more of the younger age cohort elders reported being unable to afford repairs than those of the oldest age group. Perhaps elders in the younger age ranges have financial commitments to younger or older generations which make them less able to afford repairs or improvements. When asked if they were financially able to make repairs or improvements, 73.6% of non-white elders indicate they are unable, but 26.4% are. For white elders the percentages are nearly reversed-38.2% unable and 61.8% able. These differences are highly significant.

As expected, income level strongly influences ability to afford repairs or improvements. An income of just under $15,000 a year is the level at which slightly more than 60% of elders report being able to afford repairs and improvements.

Just over 43% of owners indicate they are unable to afford repairs or improvements though 56.8% said they are able. A smaller percentage of renters indicate inability. Over 60% of those with "other" housing arrangements are unable to afford repairs or improvements. Households of three-or-more persons have the largest percentage of elders who indicate inability to make needed repairs. This relationship is highly significant.

MOVING WITHIN THE NEXT YEAR: Tables 28 through 32 provide detailed responses by category. Less than 10% of elders indicate that they have been thinking about moving within the next year or so. Elders responding "yes" were asked if they would be most likely to move within their county, somewhere else in Arkansas, or out of state. In general, most elders who are considering a move are more likely to move within the state than outside Arkansas. Age is significantly related to moves out of state, however, with the oldest age group, those over eighty, most likely to move.

Although the numbers are small, this finding is interesting for long term care policy questions related to the needs of elders who retire to a new state. Are they more likely to move to another state as they reach old age? Further research is needed. Results are not significant for the other categories analyzed.

HOUSING CHOICES: Elders were asked what types of housing choices would be considered for a move within the next two years. Tables 33 through 37 provide detailed responses by category. Age is significantly related to the choices of "smaller house," "with relatives," "senior housing," and "mobile home." "Mobile home" and "smaller house" are choices of younger elders. "Senior housing" and "with relatives" is a more frequent choice of older elders. For most categories, "smaller house" ranks as the first choice, "none-of-the-above" as the second choice, "apartment," "senior housing," and "retirement community" the next most frequent responses.

Household size is significantly related to choices; elders who live alone are more likely to choose an "apartment," "senior housing," "with relatives," and "nursing home" than are elders of larger households. Two- and three-or-more person households chose "smaller house" most frequently. "Retirement community" is most likely to be chosen by two-person households, followed by elders who live alone. Owners are most likely to choose "smaller house" or "apartment," renters, "apartment" or "senior housing." "None of the above" is a frequent choice. A choice of "none of the above" may mean that the elders' current housing situation is the preferred one.

Non-white elders select "none-of-the-above" as the most frequent choice followed by "smaller house" and "senior housing". "Living with relatives" is more frequently chosen by this group than by any other group except those elders with incomes between $4-7,000. Non-white elders are significantly less likely to select "retirement community" than white elders. "Sharing a house" is chosen as a selection less than 10% of the time. Income is significantly related to housing preferences. Higher income elders are significantly more likely to choose "retirement community" or "smaller house," and less likely to choose "with relatives," "share a house," or "senior housing".

SALE OF HOME DUE TO FINANCIAL PRESSURE: Age alone does not significantly relate to elders' feeling financial pressure to sell their homes. Race, however, is significantly related. Tables 38 through 42 provide detailed responses by category. For both whites and non-whites about 8% of elders indicated that financial pressures might force them to sell their homes. Just over 70% of whites and 56.8% of non-whites said "no". Just over 20% of white elders and 35% of non-white elders "do not know". Both the "no" and "don't know" categories are significantly different by race. As expected, income is significantly related to elders' feeling financial pressure to sell their homes. Although fewer than 15% of elders at all income levels responded "yes," lower income elders are more likely to respond "yes." A much larger proportion of elders at low to mid income levels choose the "do not know" response. From a policy perspective, the "do not know" response may describe a category of elders who would be at risk for financial difficulty in maintaining ownership of their homes. Over 69% of owners respond "no," with 21% indicating that they do not know. These results are not statistically significant for the ownership variable. A significantly larger percentage of elders who live alone respond "yes" than elders from larger households. While more than 60% of elders who live alone do not think financial pressures would force them to sell their homes, almost one-fourth choose the "do not know" response, a possible indicator of risk.

INTEREST IN HOME SHARING: Tables 43 through 57 provide detailed responses by category. Arkansas elders were generally not interested in home sharing. Just under 75% of elders, regardless of category, indicate no interest in home sharing. For the one quarter who are interested, significant differences can be found in their reasons. For the variable of age, the response "to feel safer" was significant for the older age cohorts. That response was also significant for non-white elders. Other choices are not significantly different. For elders who live alone, "to help with chores" and "for companionship" are choices that differ significantly by housing arrangement. Elders in "other" types of housing choose "to reduce cost of housing" more often than elders in other categories. Presumably, those elders neither rent nor own their homes but reside with someone else or live in a group residence.

Even larger percentages of "not interested" responses are found when house sharing was paired with housing choice. For the under 10% who were interested, having someone share their home is far preferred to sharing someone else's home. When asked about the age of the home sharer, most elders prefer someone their own age or younger as a housemate.

ADDITIONAL RESOURCES: Elders were asked if they could think of anything they needed in their home which would help them stay there longer. Tables 58-62 provide detailed responses by category. Items needed ranged from wheelchair ramps, bathtub chairs, and an oxygen cart, to storm windows, house underpinned, elevator, financial aid, and running water. Appendix C lists all items mentioned. Older elders reply "yes" to the question significantly more often than younger ones. More younger elders reply "don't know" than older elders. Non-white elders are significantly more likely to reply "yes" than white elders. Income significantly impacts responses. Elders with lower incomes indicate they can think of items they need which would help them remain in their home longer more than elders with higher incomes. No significant differences are found for owners versus renters, but household size is a significant factor with elders who live alone significantly more likely to reply "yes" than elders in other size households.

SPECIFIC HOUSING CHARACTERISTICS

NUMBER OF ROOMS: Tables 63 through 67 provide detailed responses by category. For most categories five to six rooms is the average size of the residence. Those over eighty and elders who live alone are more likely to have fewer rooms. Renters are significantly more likely to have fewer rooms than owners, with just over 72% of renters having four or fewer rooms. Race was not significant for number of rooms.

NUMBER OF BEDROOMS: Tables 68 through 72 provide detailed responses by category. The number of bedrooms varies significantly by age, with elders in the older age cohorts more likely to have fewer bedrooms and those in the younger groups more likely to have more bedrooms. The number of bedrooms does not differ significantly by race, with the majority of elders reporting two or three bedrooms. Income, as expected, significantly influenced the number of bedrooms, with elders having incomes over $10,000 more likely to have three or more bedrooms than elders with lower incomes. Renters are more likely to have one or two bedrooms than owners. Larger households have more bedrooms than do smaller households. Elders who live alone are significantly more likely to have fewer bedrooms. A small percentage of elders report having no bedroom. These individuals are predominantly non-white elders and elders with incomes under $4,000.

INDOOR PLUMBING: Tables 73 through 77 provide detailed responses by category. Indoor plumbing is present in the vast majority of elder's homes in Arkansas. However, although the numbers are small, non-white elders are significantly more likely to be without indoor plumbing than white elders. Indoor plumbing is reported by 99.4% of white elders and 97.2% of non-white elders. At all income levels, indoor plumbing is present in 97.6% or more of the homes. Just over 99% of owners, and 100% of renters report having indoor plumbing.

COMPLETE BATHROOM FACILITIES: Complete bathroom facilities, by definition, include hot and cold piped water, a flush toilet, and bathtub or shower. Tables 78 through 82 provide detailed responses by category. Nearly 10% of non-white elders did not have complete bathroom facilities compared to 0.7% of white elders, a statistically significant difference. Income and age are not significant variables for this question. More than 5% of elders with incomes under $4,000 do not have complete bathroom facilities, the highest percentage for any income category. Just under 2% of owners, and 1.1% of renters, do not have complete bathroom facilities. In the category of household size, while only 1.3% of those who live alone and 0.9% of two-person households do not have complete bathroom facilities, 5.3% of three-or-more-person households are without complete facilities, a significant finding.

NUMBER OF BATHROOMS: Tables 83 through 87 provide detailed responses by category. The over eighty age group was significantly more likely to have one bathroom. As expected, as income increases, the number of bathrooms significantly increase. However, non-white elders are more likely to have none, or one bathroom, than white elders. Owners were likely to have more bathrooms than renters. Larger household size generally mean more bathrooms.

USE OF BATHROOMS: Tables 88 through 92 provide detailed responses by category. Generally, bathrooms are used by a single household only. Occasionally, another household shares a bathroom, particularly, elders with incomes below $4,000. Somewhat more frequently, elders report having no bathroom. The highest response of "no bathroom" occurred for the categories of income below $4,000 and for ownership "other." No statistically significant differences are noted for this question.

BREAKDOWN OF FLUSH TOILET: The two time periods surveyed were occurrence of breakdown within the last three months and duration of breakdown for more than one day. Tables 93 through 97 provide detail of responses by category. Just over 14.2% of non-white elders and 4.4% of white elders report breakdowns, a significant finding. Elders with incomes below $10,000 are somewhat more likely to reply "yes" to the question, a finding which approaches significance. Ownership status, household size, and age are not significant for this question. The response of "no flush toilet" is reported most frequently by non-white elders, elders with incomes below $4,000, and elders in the ownership category of "other."

COMPLETE KITCHEN FACILITIES: Complete kitchen facilities are defined to include a sink, hot and cold piped water, a refrigerator, and a range or cookstove available for the elder's use. Tables 98 through 102 provide detailed responses by category. Age is not significant for this question. Just under 10% of non-white elders do not have complete kitchen facilities compared with 0.8% of white elders, a significant finding. For elders with incomes in the ranges of less than $4,000, $4-6,999, and $7-9,999, just under 4% lack complete kitchen facilities, results which meet the definition of significance. For households of three or more persons, 6.5% report lacking complete kitchen facilities, a significant finding. Nearly 13% of elders in the ownership category of "other" also lack complete kitchen facilities.

USE OF KITCHEN FACILITIES: Tables 103 through 107 provide detailed responses by category. Overall, elders in this sample have the exclusive use of their kitchens whether they are complete or not.

BREAKDOWN OF RUNNING WATER: The two time periods surveyed for breakdown are occurrence within the last three months and duration of more than one day. Tables 108 through 112 provide detailed responses by category. Just over 10% of non-white elders report a breakdown of running water compared with 2.8% of white elders, a significant finding. Elders with lower incomes, especially those below $10,000 report higher percentages of breakdown than higher income elders, also a statistically significant result. The analyses of results by categories of age, ownership, and household size do not yield significant findings.

TYPE OF HOME HEATING: Tables 113 through 117 provide detailed responses by category. Gas and wood stove are the most frequently reported types of heat, with propane third. Renters list gas and electricity first and second followed by wood stove and propane. Single-person households list gas and propane first and second followed by wood stove and electricity. Non-white elders are significantly less likely to have electricity as the source of heat than white elders. Although very few elders report having no heat, elders in the 60-69 year age group are significantly more likely to have no heat than any other age cohort. As income increases, use of gas, electricity, and wood stove also increase as the source of winter heat.

BREAKDOWN IN HEATING: "During the past winter" and "duration of more than one day" were the two heating breakdown queries used. Tables 118 through 122 provide detailed responses by category. Elders report no breakdown in heating in more than 95% of responses in all categories. No significant differences are found in categories of age, sex, race, or household size.

AIR CONDITIONING: Tables 123 through 127 provide detailed responses by category. Just over 75% of white elders report having air conditioning compared with 44.9% of non-white elders, a significant finding. As expected, the use of air conditioning increases as income increases, with 33% of elders with incomes under $4,000 and 86% of elders with incomes between $20-29,000 having air conditioning. This difference is also statistically significant. Just over 73% of owners compared with 66% of renters have air conditioning. Two-person households are somewhat more likely to have air conditioning than single-person or three-or-more-person households.

HOUSING PROBLEMS: Elders were asked if rodents or signs of rodents were seen within the last three months; if the roof leaked; if open cracks or holes were present in interior walls or ceilings; if areas of broken plaster larger than a letter-sized envelope were present; and if stairs or steps were a problem because of loose, broken, or missing steps. Tables 128 through 132 detailed responses by category.

Age is not a significant factor for these housing problems. Race is significant for each household problem, with a much larger percentage of non-white elders reporting the presence of all problems than white elders. The presence of mice, rats, or signs of mice or rats is the problem reported by the largest percentage of elders regardless of category. But owners are more likely to have problems in each category than renters. Elders in two-person households have lower percentages of most problems than elders in one-person or three-or-more person households. Three-or-more-person households are more likely to have cracks or holes in walls, broken plaster, and roof leaks than households of other sizes. The presence of rodents or signs of rodents was the same for one-and for two-person households. Three-or-more-person households had the highest percentages of all problems in the household-size category.

CONCEALED WIRING: Neither age nor ownership status are significantly related to the presence of concealed wiring in homes. Tables 133 through 137 provide detailed responses by category. Only 73.6% of non-white elders report that all wiring is concealed, compared with 94% of white elders, a significant finding. As income increases, the percentage of homes with concealed wiring increases. However, even at the highest income levels, there are small percentages of elders reporting that not all wiring was concealed in walls or metal coverings. Larger households have a higher percentage of "no" responses than other size households. Two-person households have the lowest percentage of "no" responses in the household size category.

ENERGY CONSERVATION, MAINTENANCE, AND HOME SAFETY FEATURES

INSULATION: Tables 138 through 142 provide detailed responses by category. The oldest Arkansans, those over eighty, are significantly more likely to have no insulation than younger elders. One-fifth of the oldest group, compared with 8% of the under sixty elders, indicate having no insulation. Just over 57% of non-white elders report partial or complete insulation of their residences compared with 86.9% of white elders. Slightly more than 36% of non-white elders have no insulation, compared with 10.4% of white elders. These differences are highly significant. Small percentages, 5.6% of non-whites and 3.5% of whites, do not know whether they have insulation.

The impact of income on insulation is highly significant. As income increases, the percentage of homes with complete or partial insulation also increases. Just under 60% of elders with incomes less than $4,000 report complete or partial insulation, compared with more than 92% of elders with incomes over $15,000. At the $10,000 income level over 80% of elders have complete or partial insulation in their residences. The percentages for complete or partial insulation vary considerably, with many fewer elders reporting complete (ceilings, walls, floors) insulation. Even at the highest income level of $30,000 or more, only 62.7% of elders report complete insulation. The state average is 39.2%. The maximum percentage of partially insulated residences is 47%, with a state average of 42.5 % for all income levels.

Ownership is significantly related to the use of insulation. About 84% of elders who own homes report complete (41.9%) or partial (43.1%) insulation. Just over 12% of owned homes are not insulated. Elders who rent report significantly lower percentages of insulation (33% complete and 26.7% partial).

Presence and amount of insulation varies also by the number living in the household. Those who live alone are significantly less likely to have no insulation. Two-person households are most likely to be insulated.

STORM WINDOWS: Age alone is not a significant factor for the use of storm windows by elders. Race, income, household size, and ownership status are significantly related to availability. Tables 143 through 147 provide detailed responses by category. Use of storm windows varies by race: 29% of non-white elders and 48.2% of white elders report having storm windows. Income influences the use of storm windows, although even at the highest levels of income, $30,000 or more, only 58.4% of homes have them. For elders with incomes below $10,000, about 37% of homes report having storm windows. Just under 48% of elders who are home owners have storm windows versus 33.8% of elders who are renters.

The presence of storm windows varies by household size, with 42.5% of one-person, 49.7% of two-person, and 39.7% of three-or-more person households having storm windows.

TERMITE CONTRACTS: While age alone is not significantly related to the use of a termite contract, the variables of race, income, household size, and ownership are significant. Tables 148 through 152 provide detailed responses by category. Just over 42% of white elders report maintaining termite contracts. By contrast, only 14.1% of non-white elders said contracts are maintained. Only 1.2% of white elders and a significant 4% of non-white elders do not know if their homes are covered by a termite contract. These differences are significant.

As expected, income level significantly influences the use of termite contracts, only 7.6% of elders with incomes less than $4,000 indicate "yes," and 43% of respondents with incomes between

$15-$19,000 said "yes." State-wide, an average of 37.7% of elder households indicate they maintain a termite contract on their property. For home owners, 41.5% maintain, and 57.1% do not maintain, a termite contract. Household size does not seem to influence the use of termite contracts since 38.2% of one-person, 42.5% of two-person, and 30.2% of three-or-more-person households have contracts. The "don't know" response rate of the three-or more person households is significant.

ENERGY SAVING DEVICES: Elders were asked if their home or building had other energy saving devices. Tables 153 through 157 provide detailed responses by category. Appendix C lists all items mentioned. In all categories, fewer than 20% of households had other energy saving devices. Items listed include solar hot water, heat pump, storm windows, double patio doors, wood stove and others. White elders are significantly more likely than non-white elders to have other energy saving devices. Those who live alone are least likely to have other energy saving devices.

HOME SAFETY DEVICES: Home safety devices include smoke alarms, grab bars in bathtub, dead bolt locks, peep hole in front door, burglar alarms, stair rails, and security lights. Tables 158 through 162 provide detailed responses by category. By age the use of grab bars varies significantly with the older age cohorts more likely than the younger to use them. Age is also related to the use of smoke alarms with younger elders more likely to have them. Burglar alarms, however are more likely to be reported by the older age cohorts.

Race is significantly related to use of_smoke alarms, with non-white elders significantly less likely than white elders to have them. Among the home safety devices of grab bars in tub, dead bolt locks, and stair rails, non-white elders are significantly less likely to have them than white elders. Other percentage differences for race are not statistically significant.

Income significantly influences use of some of the home safety devices. Significant differences are found for smoke alarms, dead bolt locks, peep hole in front door, stair rail, and security light, with elders with lower incomes less likely to have the device than elders with higher incomes.

In the ownership category, grab bars in the tub and peep hole in the front door are more likely to be present for renters, perhaps related to code requirements for multifamily rental properties. In all categories, smoke alarms are the elders' most frequently used home safety device, possibly because of the low cost and ease of installation. Use of dead bolt locks is usually second with peep hole in the front door, third. More white than non-white elders use all devices except peep holes and burglar alarms.

DISCUSSION

What conclusions can be drawn from the Arkansas Housing Survey? Most Arkansas elders live in a house rather than an apartment, mobile home, or other type of residence. As age increases, the likelihood of living alone also increases. Younger Arkansas elders are less likely to live alone.

More than a majority of elders own their own homes. Just over 60% rate their housing as in good or in very good physical condition. More than 80% of elders are satisfied or very satisfied with their housing. The ability to afford repairs or improvements varies considerably by characteristic studied, with a large group of younger elders who report an inability to afford them. Most Arkansas elders do not plan to move within the next year, but for those who do, age and race seem to have the largest effect on out-of-state choices. Housing preferences, if a move is necessary within a two year period, are varied. For a substantial number, none of the options offered is a preferred choice. A smaller house appears to be the choice of many elders. While relatively few Arkansas elders feel that financial pressures will force them to sell their homes, many are unable to respond to that question with a definite no, a possibly troubling finding. Only one quarter of all elders have any interest in a home-sharing program, and the majority want someone about the same age or younger to live with them.

For some of the specific housing characteristics, income level and the number in the household are the categories that have the largest differences. As expected, elders with higher incomes generally have larger houses in better physical condition. Few Arkansans have to share a bathroom or kitchen with others. Only a small percentage are without these basic facilities. Twenty percent of elders report that wood was the primary source of winter heating. Air conditioning is used by about 70% of elders overall, although the percentage varies considerably by age, race, and income. Rodents, or signs of rodents, are the most frequently reported housing problem. About 80% of all elder's housing have some amount of insulation although only 40% of homes are completely insulated. Storm windows are present in about 45% of homes; termite contracts in place for just over 39%. Home safety devices are not as prevalent as one might wish; smoke alarms are most frequently in place. Rental property seems to have the most safety equipment, perhaps reflecting new housing or senior housing use.

For elders classified by race, by age, by income, by living alone, by three-or-more-person household, and by the ownership category of "other," housing problems are apparent. More differences on the basis of race are found than for any other single category. For almost all measures, non-white elders have significantly greater housing problems than white elders. Non-white elders means primarily black elders due to the very low percentages in Arkansas of Hispanic, native American, or Asian elders. While the relatively small number of minorities in this sample results in larger sampling error than was true in the Phase I study, the representativeness of this small group is apparent. The significant differences by individual topic area are discussed in the analysis section. Non-white elders are significantly different from white elders in most critical areas of housing including general and specific housing conditions; levels of dissatisfaction; likelihood of moving out of state; inability to make repairs; and likelihood of breakdown of critical systems. Non-white elders are less likely to have air conditioning, storm windows, termite contracts, or home safety devices such as smoke alarms, stair rails, locks, and other items. Data from this survey suggest that non-white elders face significant risks with their housing.

Age is a critical factor for some but not the majority of the housing topics. Younger elders are more likely to live in a house than older elders who show increased use of apartments and group-type homes. Not unexpectedly, the percentage of elders who live alone increases significantly with age while the percentage of those who live in larger households decreases. Also, home ownership decreases with age while home rental increased. With age, there is also an increase in the possibility of living with others, with the elder having neither the status of an owner nor a renter. Although the overall number of elders who are thinking of moving is small, among those who were thinking of moving, age was a significant factor in out-of-state moves. For the oldest age cohort, moving out-of-state, rather than somewhere in-state is a significant finding. Age is also a significant factor in elders' housing preferences. Age is significantly related to choices of living with relatives, in senior housing, and away from the choices of a smaller house and a mobile home. Although few elders indicate an interest in home sharing, age is significant in the choice of "to feel safer" for those who are interested. Age is a factor for some questions of room size and number, but not for physical condition of housing or for specific housing problems. The older age cohorts are more likely to have home safety devices such as grab bars and burglar alarms, but less likely to have smoke alarms than younger ones.

As expected, income is a factor in many housing issues. Physical condition, ability to make repairs, and housing problems are significantly related to income. The lowest income is not always a predictor of the greatest difficulty. Elders with income levels of $4-6,000 and $7-9,999 are frequently more at risk than the under $4,000 income group.

Elders who live alone are slightly more likely to live in an apartment than other elders. As expected, as age increases the percentage of those living alone increases also. Financial pressure to sell their home is somewhat higher for elders who live alone. Housing problems for elders who live alone are greater for this group than for two-person households, but significantly less than for elders in three-or-more-person households.

Elders who live in three-or-more-person households and elders who are in the ownership category of "other" appear to have high risk housing. It is possible that these two categories may overlap and that those elders who neither rent nor own their residence may also live in multi-person households. These elders have significant problems in the areas of housing physical condition, ability to make repairs, systems breakdown for utilities, and other areas. In comparison, elders who live alone have some housing problems but do not seem to be as vulnerable as elders in those two categories.

Comparisons of the Arkansas Housing Survey findings (which are age specific and self reported) with the Annual Housing Survey, (a professionally judged survey for which the most recent data, 1983, is not age specific for all categories) is risky. However, Arkansas Housing Survey findings seem generally comparable to the ranking for the southern region reported in the Annual Housing

Survey. Some age specific data reported in the literature on housing from the 1976 Annual Housing Survey shows higher problem rates for elders than Arkansas currently is reporting. However the 1976 data are now 12 years old and housing has improved dramatically in that time period. In addition, self reported surveys usually report housing to be in better condition than do professionally judged ones.

Any study of housing for the elderly must be viewed within the context of long term care issues. For elders who own their homes and who have no mortgage obligations, housing is a major asset and is the foundation for community-based long term care. With the increasing costs of institutional long term care, and the demographic projections for growth in the elderly population, there will be more emphasis on the use of existing housing as the cornerstone for long term care.

This Arkansas Housing Survey is the first comprehensive study of the elderly and their housing in Arkansas. As part of the Arkansas Longitudinal Study on Health and Aging, these data offer planners and policy makers an important opportunity to link housing issues to health, economic and service need and use information for a large sample of Arkansas elders.

Arkansas Housing Survey Appendix A

Data from the Annual Housing Survey 1983 of the U.S. Department of Commerce, Bureau of Census and the Department of Housing and Urban Devlopment

Southern Region- not age specific

COMPLETE PLUMBING

	Owner	%	Renter	%
Total Units	18825		9106	
Complete	18361	97.5	8671	95.2
Lacking	464	2.4	435	4.7

COMPLETE BATHROOM

Total Units	18825		9106	
1	8363	44.4	6568	72.1
1 1/2	2500	13.2	764	8.4
2+	7433	39.4	1297	14.2
Used by another household	1	<.1	39	.39
None	529	2.8	442	4.85

COMPLETE KITCHEN

Total Units	18825		9106	
Household only	18676	99.2	8876	97.4
Another Household	4	.02	4	.04
No complete kitchen	145	.7	226	2.4

NUMBER OF ROOMS

Total Units	18825		9106	
1	28	.1	139	1.5
2	74	.4	482	5.3
3	485	2.6	1844	20.3
4	2510	13.3	3028	33.3
5	5473	29.0	2035	22.3
6	4982	26.5	1038	11.4
7	5272	28.0	542	6.0

	Owner	%	Renter	%
NUMBER OF BEDROOMS				
Total Units	18825		9106	
None	30	.2	183	2.0
1	521	2.8	2457	27.0
2	5379	28.6	4045	44.4
3	10042	53.3	2602	22.6
4+	2852	15.2	359	3.9
HOUSEHOLD SIZE				
Total Units	18825		9106	
1	3091	16.4	2744	30.1
2	6246	33.2	2654	29.1
3+	9488	50.4	3709	40.7
PHYSICAL CONDITION				
Walls and Ceilings				
Total Units	18825		9106	
With Cracks and Holes	785	4.2	1180	13.0
None	18006	95.6	7919	87.0
Broken Plaster				
Total Units	18825		9106	
With Broken Plaster	452	2.4	560	6.1
None	18343	97.4	8536	93.7
RACE				
Total Units	18825		9106	
White	15789	84.0	6324	69.4
Black	2404	12.8	2305	25.7
HOUSEHOLD COMPOSITION BY AGE				
Total Units	18825		9106	
2-person household	15734	83.3	6363	69.8
Married couple	13325		3784	
65+	2330	17.4	287	7.5
1-person household-male	3091		1295	
65+	321	10.4	170	13.1
1-person household-female	2173		1449	
65+	1399	64.4	585	40.0

SOURCE OF FUEL

	Number	%
All Units	27931	
Gas	12346	44.2
Propane	2169	7.7
Oil	2272	8.1
Electricity	8557	30.6
Coal	136	.5
Wood	1882	6.7
Other	18	.06
None	265	.94

AIR CONDITIONING

All Units	27931	
None	6075	21.7
Room	9166	32.8
Central	12690	46.4

FOR ADMINISTRATIVE USE ONLY 24

____

__________ EDITED

ARKANSAS HOUSING SURVEY

During 1986, the elders or pre-retirement individuals in your household participated in a study of health and aging conducted by the Arkansas Division of Aging and your local Area Agency on Aging. At the end of that study, we told you that we would contact you later about some additional information we needed to help your local officials plan for future housing needs. We would appreciate it if you would take the time to answer the questions we have included here and mail this survey/questionnaire back to us in the pre-paid envelope we have sent to you. We appreciate the help you are giving the state by answering these questions. If you have any questions or concerns about completing this survey, please contact your local Area Agency on Aging.

PLEASE FILL IN BLANK OR CIRCLE ANSWERS.

DO NOT MARK IN THIS SPACE

1. Would you describe your home as **(CIRCLE ANSWER):**
   1. House or home (NOT ATTACHED TO ANOTHER HOUSE)
   2. Condominium
   3. Apartment or duplex
   4. Mobile Home
   5. Boarding home or group home
   6. Other (Please Specify) ____________________ ______

2. Do you 1. Own 2. Rent 3. Have some other arrangement (Please Specify) ______________ ______

3. Including yourself, how many people live in your home? ____________ ______

4. How would you describe the physical condition of your home?
   Would you say its condition is: **(CIRCLE ANSWER):**
   VERY GOOD (NEEDS NO REPAIRING) 5
   GOOD 4
   FAIR. 3
   POOR, OR 2
   VERY POOR? (NEEDS MAJOR REPAIR WORK) .... 1 ______

5. In general, how satisfied are you with the home you are living in now?
   Are you **(CIRCLE ANSWER):**
   VERY SATISFIED. 5
   SATISFIED. 4
   SOMETIMES SATISFIED. 3
   SOMETIMES DISSATISFIED. 2
   VERY DISSATISFIED .... 1 ______

6. Have you put off necessary repairs or improvements because of the lack of money to pay for them? **(CIRCLE ANSWER):** 1. Yes 2. No ______

7. How many rooms do you have (not counting bathrooms, halls or closets)?________ ______

8. How many bedrooms do you have? ________ ______

9. Do you have in-door plumbing? **(CIRCLE ANSWER):** 1. Yes 2. No ______

10. Does your home or building have complete bathroom facilities--that is hot and cold piped water, a flush toilet and bathtub or shower? 1. Yes 2. No ______

11. How many bathrooms do you have? _____ (FILL IN BLANK): ______

12. Are the bathrooms (CIRCLE ANSWER):
1. Used by your household only
2. Also used by another household
3. No bathroom ______

13. At any time in the last 3 months was there a breakdown in your flush toilet such that there was no usable toilet for more than one day? (CIRCLE ANSWER):
1. Yes 2. No 3. No flush toilets ______

14. Does your home or building have complete kitchen facilities: that is, a kitchen sink, with hot and cold piped water, a refrigerator and a range or cookstove which are available for your use? 1. Yes 2. No ______

15. Are the kitchen facilities (CIRCLE ANSWER):
1. Used by your household only
2. Also used by another household
3. No complete kitchen facilities ______

16. At any time during the last 3 months, were you without running water for more than 1 day? 1. Yes 2. No 3. No running water ______

17. How is your home heated in winter? (CIRCLE ANSWER):
1. Natural gas
2. Bottled gas (propane)
3. Electricity
4. Wood stove, fireplace
5. Coal
6. Oil
7. Other (Specify) ____________
8. No heating ______

18. During this past winter, did your heating system break down for more than one day? 1. Yes 2. No 3. No heating ______

19. Is your home air conditioned? (CIRCLE ANSWER): 1. Yes 2. No ______

20. At any time in the last 3 months, have you seen any mice, rats, or signs of mice or rats in your home or building? (CIRCLE ANSWER):
1. Yes 2. No ______

21. Are there any leaks in the roof? (CIRCLE ANSWER): 1. Yes 2. No ______

22. Does your home have open cracks or holes in interior walls or ceilings?
1. Yes 2. No ______

23. Are there any areas of broken plaster on the ceiling or inside walls which are larger than a letter-size envelope? 1. Yes 2. No ______

24. Are there any stairs or steps in your home which are a problem for you or others because of loose, broken, or missing steps? 1. Yes 2. No ______

25. Not counting appliance cords or extension cords, is all the wiring in your home concealed in the walls or in metal coverings? (CIRCLE ANSWER):
1. Yes 2. No 3. No electricity ______

26. Is your home insulated? **(CIRCLE ANSWER):**
1. Yes, completely (attic, walls and floors)
2. Yes, part is insulated
3. No
4. Don't know ______

27. Does your home or building have storm windows over the regular windows?
1. Yes 2. No ______

28. Does your home or building have any other energy saving devices?
1. Yes 2. No ______

If **YES**, please list **WHAT KINDS OF DEVICES:**

____ ______

____ ______

29. If you own your home, do you now have a contract for checking for and treating for termite damage in your home? **(CIRCLE ANSWER):**
1. Yes 3. Don't know
2. No 4. Live in apartment or rented home ______

30. Have you been thinking about moving in the next year or so? 1. Yes 2. No ______

If NO, SKIP TO 32. If YES,

31. Where do you think you would move?
   1. Somewhere in this county
   2. Somewhere else in Arkansas
   3. Out of state ______

32. Do you feel financial pressures might force you to sell your home?
1. Yes 2. No 3. Don't know ______

33. If you had to move somewhere during the next two years, would you consider any of the following choices as a possibility?

CIRCLE ALL YOU WOULD CONSIDER:

01. A smaller house ______
02. An apartment ______
03. Move in with relatives ______
04. Share a house with someone else ______
05. Retirement community ______
06. Senior citizen housing (any group housing serving mostly elders) ______
07. Public housing ______
08. Rooming or boarding house ______
09. Mobile home ______
10. Nursing home ______
11. Another type of housing, please specify ______________ ______
12. None of the above ______

34. Some people are interested in sharing a house with another person. Would sharing a house appeal to you for any of the following reasons?

(CIRCLE ALL THAT APPLY):

1) if you could not keep up with all the chores around the house.
2) to reduce the cost of housing
3) to feel safer
4) companionship
5) other reason, please specify: ____________________
6) not interested in sharing a home for any reason ______

35. Would you prefer to **(CIRCLE ANSWER):**
1. Share your home
2. Move, and share someone else's home
3. Not interested in home sharing ____

36. Would you prefer to live with another person **(CIRCLE ANSWER):**
1. About the same age as you
2. Someone younger
3. Someone older
4. Not interested in home sharing ____

37 Does your home have any of the following:
(CIRCLE ALL THAT YOU HAVE IN YOUR HOME):

1. Smoke alarm
2. Grab bars in bathtub
3. Dead bolt locks
4. Peep hole in front door
5. Burglar alarm
6. Stair rails
7. Security lights ____

38. Can you think of anything you need in your home which would help you be able to stay there longer? For example, do you need grab bars in your bathroom, ramps for wheelchairs or anything like that? 1. Yes 2. No 3. Don't know ____
If **YES**, What kinds of things do you need? **(FILL IN BLANKS)**

______________________________ ____

______________________________ ____

Thank you for taking the time to answer these questions. Your responses can help local agencies plan for what kinds of services elders in your community might need in the future. Remember, your answers are used only for research purposes, and everything you tell us is confidential.

Place this survey in the pre-paid envelope provided and return it as soon as possible. We need you to return the survey within two weeks if at all possible. If you have any questions or concerns, please contact your local Area Agency on Aging.

It would be helpful if you would update our records by completing the information below.

NAME ______________________________

ADDRESS ______________________________

CITY ______________ STATE ________ ZIP ____________

PHONE NUMBER (____) ____-_____

THANK YOU!

APPENDIX C

LIST OF ADDITIONAL RESOURCES

1. grab bars
2. wheelchair ramp
3. wall rail
4. security devices
5. bathtub chair
6. house repairs
7. help with chores
8. heating
9. transportation
10. smoke alarm
11. maintenance
12. shower
13. storm windows
14. storm doors
15. higher commode
16. insulation
17. siding
18. floors
19. lift chair
20. oxygen and cart
21. underpinned (house)
22. house raising
23. larger doorways
24. elevator
25. wiring
26. roof
27. door bell
28. screens
29. wheel chair shower
30. financial aid
31. air conditioning
32. bathroom
33. running water

LIST OF OTHER ENERGY SAVING DEVICES

1. siding
2. heat pump
3. solar hot water
4. thermal windows
5. energy device on air conditioner
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TABLE 1

TYPE OF HOUSING BY AGE

	<60		60-69		70-79		80+		Total State	
Type of Housing	No.	%	No.	%	No.	%	No.	%	No.	%
House or Home	225	95.0	412	91.4	368	90.0	105	84.4	1110	90.9
Apartment or Duplex	3	1.2	15	3.3	20	5.0	10	8.3	48	3.9
Mobile Home	8	3.2	19	4.2	14	3.4	5	3.8	45	3.7
Boarding Home or Group	2	.6	5	1.2	7	1.6	4	3.5	18	1.4

Chi Square significant at the .0272 level.
Number of responses: 1221

TABLE 2

TYPE OF HOUSING BY RACE

	White		Nonwhite		Total State	
Type of Housing	No.	%	No.	%	No.	%
House or Home	981	90.5	131	94.6	1112	90.9
Apartment or Duplex	45	4.2	3	2.2	48	3.9
Mobile Home	45	4.2	0	--	45	3.7
Boarding Home or Group Home	13	1.2	5	3.3	18	1.4

Chi Square significant at the .0132 level.
Number of Responses: 1223

TABLE 3

TYPE OF HOUSING BY OWNERSHIP

	Own		Rent		Other		Total State	
Housing Type	No.	%	No.	%	No.	%	No.	%
House or Home	1101	94.3	47	47.9	22	86.8	1170	90.6
Apartment or Duplex	3	.2	47	48.3	2	7.3	52	4.0
Mobile Home	48	4.1	1	1.0	0	--	49	3.8
Boarding Home or Group Home	15	1.3	3	2.9	2	5.9	20	1.5

Chi Square significant at the .0001 level.
Number of Responses: 1291

TABLE 4

TYPE OF HOUSING BY INCOME

Type of Housing	$0-3,999	$4,000 -6,999	$7,000 -9,999	$10,000 14,999	$15,000 -19,999	$20,000 -29,999	$30,000+	TOTAL STATE
House or Home	93.3	85.9	87.7	91.5	96.3	95.3	93.9	91.0
Apartment or Duplex	2.7	6.1	5.3	2.4	1.8	2.8	1.7	3.6
Mobile Home	2.7	5.2	5.9	4.8	1.8	1.9	1.7	3.9
Boarding Home or Group Home	1.3	2.8	1.1	1.3	--	--	2.6	1.5

Chi Square not significant .1966
Number of responses: 937

TABLE 5

TYPE OF HOUSING BY NUMBER IN HOUSEHOLD

	Live Alone		Two Person Household		Three+ Household		Total State	
Type of Housing	No.	%	No.	%	No.	%	No.	%
House or Home	442	86.4	602	94.0	103	91.2	1147	90.7
Apartment or Duplex	37	7.2	12	1.9	1	.8	50	4.8
Mobile Home	23	4..5	19	2.9	7	5.9	48	3.8
Boarding Home or .Group Home	10	2.0	7	1.1	2	2.2	20	1.6

Chi Square significant at the .0001 level.

Number of responses: 1226

TABLE 6

HOUSEHOLD SIZE BY AGE

Household Size	<60		60-69		70-79		80+		Total State	
	No.	%	No.	%	No.	%	No.	%	No.	%
Lives Alone	43	18.1	136	30.6	230	55.1	92	70.1	501	40.7
Two-Person Household	153	64.6	261	58.7	167	40.1	36	27.7	617	50.2
Three+ Person Household	41	17.3	48	10.7	20	4.8	3	2.1	111	9.1

Chi Square significant at the .0001 level.
Number of responses: 1230

TABLE 7

NUMBER OF PEOPLE IN HOUSEHOLD BY RACE

	White		Nonwhite		Total State	
Number in Household	No.	%	No.	%	No.	%
Live Alone	430	40.0	72	46.2	502	40.8
Two Person Household	565	52.6	53	33.7	617	50.2
Three+ Person Household	80	7.4	32	20.2	111	9.1

Chi Square significant at the .0001 level.
Number of Responses: 1230

TABLE 8

HOUSEHOLD SIZE BY INCOME

Household Size	$0-3,999	$4,000-6,999	$7,000-9,999	$10,000-14,999	$15,000-19,999	$20,000-29,999	$30,000+	TOTAL STATE
Live Alone	72.2	72.1	44.9	33.2	26.2	22.6	13.2	43.2
Two Person Household	19.8	23.0	46.8	54.3	62.9	22.6	13.2	47.8
Three+ Person Household	8.0	4.9	8.3	12.5	10.9	3.8	16.4	9.0

Chi Square significant at the .0001 level.
Number of responses: 943

TABLE 9

OWNERSHIP BY AGE

Ownership	<60		60-69		70-79		80+		Total State	
	No.	%	No.	%	No.	%	No.	%	No.	%
Own	226	93.7	423	92.3	372	87.9	114	83.9	1136	90.2
Rent	11	4.5	30	6.6	39	9.2	17	12.6	97	7.7
Other	4	1.8	5	1.0	12	2.9	5	3.5	26	2.1

Chi Square significant at the .0138 level.
Number of responses: 1259

TABLE 10

OWNERSHIP OF HOUSING BY RACE

	White		Nonwhite		Total State	
Ownership Status	No.	%	No.	%	No.	%
Own	998	90.8	140	86.9	1138	90.3
Rent	80	7.3	17	10.3	96	7.6
Other Arrangements	22	2.0	5	2.8	26	2.1

Chi Square not significant .3058
Number of Responses: 1260

TABLE 11

OWNERSHIP BY INCOME

Ownership	$0- 3,999	$4,000 -6,999	$7,000 -9,999	$10,000 -14,999	$15,000 -19,999	$20,000 -29,999	$30,000+	[illegible]
Own	80.8	82.4	89.0	92.2	94.5	96.3	96.6	89.7
Rent	11.0	12.9	10.0	5.9	4.6	3.7	2.6	7.8
Other Arrangements	8.2	4.7	1.0	1.9	0.9	—	0.9	2.5

Chi Square significant at the .0001 level.
Number of responses: 965

TABLE 12

OWNERSHIP OF HOUSING BY NUMBER IN HOUSEHOLD

	Live Alone		Two Person Household		Three+ Household		Total State	
Ownership Status	No.	%	No.	%	No.	%	No.	%
Own	451	85.3	622	94.6	102	87.6	1175	90.2
Rent	67	12.6	27	4.2	7	5.8	101	7.7
Other Arrangements	11	1.2	8	1.2	8	6.6	27	2.1

Chi Square significant at the .0001 level.

Number of responses: 1278

Table 13

PHYSICAL CONDITION BY AGE

Housing Physical Condition	<60		60-69		70-79		80+		Total State	
	No.	%	No.	%	No.	%	No.	%	No.	%
Very Poor	13	5.4	16	3.5	21	4.9	10	7.5	60	4.7
Poor	8	3.5	14	3.0	15	3.4	8	5.7	45	3.5
Fair	74	30.7	129	28.4	136	31.5	36	27.0	376	29.7
Good	85	35.3	194	42.4	165	38.3	46	34.3	490	38.8
Very Good	61	25.1	104	22.7	94	21.8	34	25.5	293	23.2

Chi Square not significant .4918
Number of responses 1263

TABLE 14

PHYSICAL CONDITION OF HOME BY RACE

	White		Nonwhite		Total State	
Condition	No.	%	No.	%	No.	%
Very Poor	33	3.0	27	16.8	60	4.7
Poor	36	3.2	9	5.6	45	3.5
Fair	319	28.9	57	35.5	376	29.7
Good	437	39.6	54	33.6	491	38.9
Very Good	279	25.3	14	8.4	293	23.2

Chi Square significant at the .0001 level.
Number of Responses: 1264

TABLE 15

PHYSICAL CONDITION OF HOME BY INCOME

Condition	$0- 3,999	$4,000 -6,999	$7,000 -9,999	$10,000 14,999	$15,000 -19,999	$20,000 29,999	$30,000+	TOTAL STATE
Very Poor	17.6	8.2	9.1	3.2	1.9			5.6
Poor	12.1	7.2	3.8	1.4	2.8		.9	3.9
Fair	38.2	41.2	39.6	32.5	28.0	16.8	5.1	30.9
Good	25.1	33.5	34.2	43.0	39.5	46.3	37.9	37.4
Very Good	7.0	9.9	13.3	19.8	27.8	36.9	56.1	22.2

Chi Square significant at the .0001 level.
Number of responses: 968

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TABLE 16

PHYSICAL CONDITION OF HOME BY OWN/RENT

	Own		Rent		Other		Total State	
Condition	No.	%	No.	%	No.	%	No.	%
Very Poor	52	4.3	2	2.4	4	15.9	59	4.4
Poor	43	3.6	2	1.9	1	3.5	46	3.4
Fair	354	29.4	29	28.1	11	41.8	394	29.5
Good	462	38.3	46	45.5	11	38.8	518	38.9
Very Good	294	24.4	22	22.1	0	--	317	23.7

Chi Square significant at the .0131 level.
Number of Responses: 1334

TABLE 17

PHYSICAL CONDITON OF HOME BY NUMBER IN HOUSEHOLD

	Live Alone		Two Person Household		Three+ Household		Total State	
Condition	No.	%	No.	%	No.	%	No.	%
Very Poor	30	5.6	18	2.8	10	9.1	58	4.5
Poor	23	4.3	17	2.6	3	2.5	43	3.3
Fair	171	32.3	176	26.8	37	33.2	384	29.5
Good	210	39.5	251	38.2	43	38.4	504	38.8
Very Good	98	18.5	195	29.7	19	16.8	312	24.0

Chi Square significant at the .0001 level.

Number of responses: 1301.

Table 18

SATISFACTION WITH HOUSING BY AGE

Level of Satisfaction	<60		60-69		70-79		80+		Total State	
	No.	%	No.	%	No.	%	No.	%	No.	%
Very Dissatisfied	10	4.2	11	2.3	17	4.0	--	--	38	3.0
Sometimes Dissatisfied	21	8.8	26	5.7	36	8.4	10	7.1	93	7.4
Sometimes Satisfied	15	6.1	32	7.1	31	7.2	12	8.6	90	7.1
Satisfied	102	42.3	213	46.5	188	44.1	50	37.3	553	43.9
Very Satisfied	93	38.6	176	38.5	155	36.3	63	46.9	[illegible]	38.7

Chi Square not significant .1685
Number of responses: 1261

TABLE 19

SATISFACTION WITH HOUSING BY RACE

Satisfaction Level	White		Nonwhite		Total State	
	No.	%	No.	%	No.	%
Very Dissatisfied	21	1.9	18	11.2	39	3.1
Sometimes Dissatisfied	73	6.7	20	12.1	93	7.4
Sometimes Satisfied	60	5.5	29	17.8	89	7.0
Satisfied	494	44.9	60	37.4	554	43.9
Very Satisfied	453	41.1	35	21.5	448	38.6

Chi Square significant at the .0001 level.

Number of responses: 1262.

TABLE 20

SATISFACTION WITH HOUSING BY INCOME

Satisfaction Level	$0-3,999	$4,000-6,999	$7,000-9,999	$10,000 14,999	$15,000-19,999	$20,000-29,999	$30,000+	TOTAL STATE
Very Dissatisfied	12.3	4.8	3.9	2.9	2.8	—	—	3.6
Sometimes Dissatisfied	8.5	13.2	8.9	7.6	4.6	2.8	3.4	7.9
Sometimes Satisfied	16.1	10.0	10.4	5.3	6.1	3.8	1.7	7.5
Satisfied	38.2	40.6	45.9	46.2	42.5	34.5	33.7	41.2
Very Satisfied	24.9	31.5	30.9	38.0	44.1	58.9	61.2	39.8

Chi Square significant at the .0001 level.
Number of responses: 968

TABLE 21

SATISFACTION WITH HOUSING BY OWN\RENT

Satisfaction Level	Own		Rent		Other		Total State	
	No.	%	No.	%	No.	%	No.	%
Very Dissatisfied	35	2.9	3	3.3	2	5.5	40	3.0
Sometimes Dissatisfied	83	6.9	10	9.3	4	15.9	97	7.3
Sometimes Satisfied	84	7.0	4	3.7	4	15.9	92	6.9
Satisfied	513	42.6	57	55.4	9	34.7	579	43.4
Very Satisfied	488	40.6	29	28.3	8	27.9	525	39.4

Chi Square significant at the .0257 level.
Number of Responses: 1333

TABLE 22

SATISFACTION WITH HOUSING BY NUMBER IN HOUSEHOLD

	Live Alone		Two Person Household		Three+ Household		Total State	
Satisfaction Level	No.	%	No.	%	No.	%	No.	%
Very Disatisfied	22	4.2	11	1.7	6	5.5	40	3.1
Sometimes Dissatisfied	39	7.3	46	7.0	8	6.6	92	7.1
Sometimes Satisfied	39	7.5	41	6.2	10	8.8	90	6.9
Satisfied	230	43.5	280	42.7	52	44.8	562	43.2
Very Satisfied	198	37.5	278	42.4	40	34.3	516	39.7

Chi Square not significant at the .1199 level.

Number of responses: 1301.

Table 23

FINANCIAL ABILITY TO MAKE HOME REPAIRS BY AGE

	<60		60-69		70-79		80+		Total State	
Financial Ability	No.	%	No.	%	No.	%	No.	%	No.	%
Unable to make repairs	122	51.8	183	41.9	164	40.7	45	35.7	515	42.8
Able to make repairs	114	48.2	254	58.1	239	59.3	80	64.3	688	57.2

Chi Square significant at the .0106 level.
Number of responses: 1202

TABLE 24

FINANCIAL ABILITY TO MAKE HOME REPAIRS BY RACE

	White		Nonwhite		Total State	
Financial Ability	No.	%	No.	%	No.	%
Unable to Make Repairs	399	38.2	117	73.6	516	42.9
Able to Make Repairs	646	61.8	42	26.4	688	57.1

Chi Square significant at the .0001 level.
Number of Responses: 1204

TABLE 25

FINANCIAL ABILITY TO MAKE HOME REPAIRS BY INCOME

Financial Ability	$0- 3,999	$4,000 -6,999	$7,000 -9,999	$10,000 14,999	$15,000 -19,999	$20,000 -29,999	$30,000+	TOTAL STATE
Unable to Make Repairs	69.6	65.1	60.5	39.0	35.1	24.0	11.2	45.4
Able to Make Repairs	30.4	34.9	39.5	61.0	64.9	76.0	88.8	54.6

Chi Square significant at the .0001 level.
Number of responses: 922

TABLE 26

FINANCIAL ABILITY TO MAKE HOME REPAIRS BY OWN\RENT

Financial Ability	Own		Rent		Other		Total State	
	No.	%	No.	%	No.	%	No.	%
Unable to Make Repairs	509	43.2	18	26.4	16	62.5	543	42.7
Able to Make Repairs	669	56.8	51	73.6	9	37.5	729	57.3

Chi Square significant at the .0030 level.
Number of Responses: 1272

TABLE 27

FINANCIAL ABILITY TO MAKE HOME REPAIRS BY NUMBER IN HOUSEHOLD

	Live Alone		Two Person Household		Three+ Household		Total State	
Financial Ability	No.	%	No.	%	No.	%	No.	%
Unable to Make Repairs	233	46.8	230	36.0	67	60.9	530	42.5
Able to Make Repairs	264	53.2	408	64.0	43	39.1	716	57.5

Chi Square significant at the .0001 level.

Number of responses: 1245.

Table 28

LOCATION OF MOVE BY AGE

	<60		60-69		70-79		80+		Total State	
Location	No.	%	No.	%	No.	%	No.	%	No.	%
Somewhere in this county	10	45.8	19	38.3	23	53.8	7	43.2	59	45.2
Somewhere else in Arkansas	9	41.7	19	39.5	12	28.0	1	5.7	42	31.8
Out of state	3	12.5	11	22.2	8	18.2	8	51.1	30	22.9

Chi Square significant at the .0321 level.
Number of responses: 130

TABLE 29

LOCATION OF MOVE BY RACE

	White		Nonwhite		Total State	
Location	No.	%	No.	%	No.	%
Somewhere in This County	55	45.7	5	37.5	59	44.9
Somewhere Else in Arkansas	39	32.3	3	25.0	42	31.6
Out of State	26	22.0	5	37.5	31	23.5

TABLE 30

LOCATION OF MOVE BY INCOME

Location	$0- 3,999	$4,000 -6,999	$7,000 -9,000	$10,000 -14,999	$15,000 -19,999	$20,000 -29,999	$30,000+	TOTAL STATE
In county	73.5	30.3	45.5	60.0	45.5	33.3	28.4	43.9
Somewhere else in Arkansas	--	39.5	36.4	20.0	27.3	53.3	28.4	30.2
Out of state	26.5	30.3	18.2	20.0	27.3	13.3	43.2	25.9

Chi Square not significant .2063.
Number of responses: 104

TABLE 31

LOCATION OF MOVE BY OWN/RENT

	Own		Rent		Other		Total State	
Location	**No.**	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**
Somewhere in This County	54	43.4	5	39.7	--	--	59	42.0
Somewhere Else in Arkansas	43	34.6	3	28.5	2	55.6	49	34.6
Out of State	28	22.0	4	31.8	2	44.4	33	23.4

Chi Square not significant .5346.
Number of responses: 141.

TABLE 32

LOCATION OF MOVE BY NUMBER IN HOUSEHOLD

	Live Alone		Two Person Household		Three+ Household		Total State	
Location	No.	%	No.	%	No.	%	No.	%
Somewhere in This County	19	37.8	36	45.1	4	33.9	58	41.7
Somewhere Else in Arkansas	17	34.2	28	35.8	3	30.5	49	34.8
Out of State	14	28.0	15	19.1	4	35.6	33	23.5

Chi Square not significant .6599.

Number of responses: 140.

Table 33

HOUSING PREFERENCES BY AGE

	<60		60-69		70-79		80+		Total State	
Preference	No.	%	No.	%	No.	%	No.	%	No.	%
Smaller house*	101	41.8	138	29.8	85	19.7	9	6.6	333	26.2
Apartment	35	14.4	92	19.9	85	19.6	20	14.4	231	18.1
With relatives**	11	4.7	30	6.5	26	6.0	22	15.7	89	7.0
Share a house	8	3.1	12	2.6	14	3.3	7	4.9	40	3.2
Retirement Community	20	8.2	61	13.3	59	13.7	11	8.2	152	11.9
Senior Housing*-*	19	7.8	64	13.9	83	19.1	25	18.1	191	15.0
Public Housing	4	1.8	9	2.0	5	1.1	2	1.4	20	1.6
Rooming or Boarding House			3	.6	5	1.1			8	.6
Mobile Home***	25	10.2	29	6.3	18	4.1	4	2.7	75	5.9
Nursing Home	7	2.8	14	3.0	20	4.6	6	4.5	47	3.7
Another type of Housing	10	4.3	16	3.5	9	2.2	5	3.4	40	3.2
None of the Above	62	25.4	98	21.2	105	24.4	33	23.7	297	23.4

* Chi Square significant at the .0001 level
** Chi Square significant at the .0003 level
*** Chi Square significant at the .0045 level
Number of responses: 1273

TABLE 34

HOUSING PREFERENCES BY RACE

	White		Nonwhite		Total State	
Preference	No.	%	No.	%	No.	%
Smaller House	297	26.8	36	21.6	333	26.1
Apartment***	219	19.8	12	7.2	231	18.1
With Relatives**	67	6.0	23	13.5	89	7.0
Share A House	33	3.0	8	4.5	40	3.2
Retirement Community**	143	12.9	9	5.4	152	11.9
Senior Housing	162	14.6	30	18.0	192	15.0
Public Housing*	14	1.3	6	3.6	20	1.6
Rooming or Boarding House	8	.7	0	--	8	.6
Mobile Home	68	6.1	8	4.5	75	5.9
Nursing Home	38	3.4	9	5.4	47	3.7
Another Type of Housing*	40	3.7	0	--	40	3.2
None of the Above*	247	22.3	51	30.6	298	23.4

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*Chi Square significant at the .05 level.
**Chi Square significant at the .001 level.
***Chi Square significant at the .0001 level.
Number of responses: 1274.

TABLE 35

HOUSING PREFERENCES BY INCOME

Preference	$0- 3,999	$4,000 -6,999	$7,000 -9,999	$10,000 14,999	$15,000 -19,999	$20,000 -29,999	$30,000+	TOTAL STATE
Smaller House***	20.3	20.8	19.3	29.3	20.2	31.3	41.3	25.6
Apartment	9.9	13.0	17.0	20.5	18.4	28.5	25.5	18.5
With Relatives****	8.7	15.2	5.4	7.1	4.2	2.8	.9	7.5
Share A House	8.2	5.0	2.5	2.2	3.7	2.8	.9	3.5
Retirement Community****	10.6	6.4	6.9	13.3	13.8	23.9	20.4	12.4
Senior Housing**	22.5	18.6	23.5	17.5	13.8	11.8	5.1	16.7
Public Housing	5.8	2.0	2.9	.9	--	--	.9	1.6

TABLE 35 (continued)

HOUSING PREFERENCES BY INCOME

Preference	$0- 3,999	$4,000 -6,999	$7,000 -9,999	$10,000 14,999	$15,000 -19,999	$20,000 -29,999	$30,000+	TOTAL STATE
Rooming or Boarding House	--	1.6	--	.5	.9	--	--	.6
Mobile Home	9.2	6.9	8.6	6.9	3.7	7.5	1.7	6.5
Nursing Home	3.1	7.3	1.9	3.6	7.4	1.9	1.7	4.2
Another Type of Housing*	2.4	1.6	1.9	4.2	2.8	2.8	8.5	3.3
None of the Above*	27.8	22.8	24.5	17.8	29.0	22.9	18.7	22.6

*Chi Square significant at the .05 level.
**Chi Square significant at the .01 level.
***Chi Square significant at the .001 level.
****Chi Square significant at the .0001 level.
Number of responses: 976

TABLE 36

HOUSING PREFERENCES BY OWN/RENT

	Own		Rent		Other		Total State	
Preference	No.	%	No.	%	No.	%	No.	%
Smaller House***	338	27.9	12	11.6	3	10.4	353	26.3
Apartment	224	18.5	23	21.9	3	10.4	249	18.6
With Relatives	81	6.7	7	6.9	5	17.3	93	7.0
Share a House***	34	2.8	4	3.6	3	12.5	41	3.1
Retirement Community	142	11.7	14	13.6	2	7.2	158	11.8
Senior Housing	174	14.4	20	19.4	5	17.3	199	14.8
Public Housing	19	1.5	3	3.3	--	--	22	1.6
Rooming or Boarding House	6	.5	2	1.8	--	--	8	.6
Mobile Home	81	6.7	4	3.6	2	9.0	87	6.5
Nursing Home	47	3.9	2	1.8	2	9.0	52	3.9
Another Type of Housing*	39	3.2	1	.9	3	10.4	42	3.2
None of the Above	282	23.3	26	25.3	3	10.4	311	23.2

*Chi Square significant at the .05 level.
**Chi Square significant at the .01 level.
Number of responses: 1341.

TABLE 37

HOUSING PREFERENCES BY NUMBER IN HOUSEHOLD

	Live Alone		Two Person Household		Three+ Household		Total State	
Preference	No.	%	No.	%	No.	%	No.	%
Smaller House ***	100	18.7	203	30.9	43	36.7	346	26.4
Apartment***	121	22.6	115	17.5	7	6.1	243	18.6
With Relatives***	57	10.8	25	3.8	7	6.2	90	6.9
Share a House*	24	4.5	13	2.0	4	3.7	41	3.2
Retirement Community	61	11.5	86	13.1	9	7.9	157	12.0
Senior Housing**	105	19.7	78	11.9	12	10.3	195	14.9
Public Housing	9	1.7	11	1.6	2	1.[illegible]	21	1.6
Rooming or Boarding House	5	.9	2	.3	1	.8	8	.6
Mobile Home**	23	4.3	49	7.5	14	12.0	86	6.6
Nursing Home	28	5.2	19	2.9	3	2.9	51	3.9
Another Type of Housing*	10	1.9	25	3.7	4	3.2	39	3.0
None of the Above	109	20.4	171	25.9	24	20.9	304	23.2

*Chi Square significant at the .05 level.
**Chi Square significant at the .01 level.
***Chi Square significant at the .0001 level.
Number of responses: 1308.

Table 38

FINANCIAL PRESSURE TO SELL HOME BY AGE

	<60		60-69		70-79		80+		Total State	
Financial Pressure	No.	%	No.	%	No.	%	No.	%	No.	%
Yes	14	6.6	34	8.6	36	9.8	9	7.6	92	8.5
No	142	66.6	279	70.6	255	69.8	76	66.9	753	69.2
Don't know	57	26.7	82	20.8	75	20.4	29	25.5	243	22.3

Chi Square not significant .4809.
Number of responses: 1088

TABLE 39

PERSONS FEELING FINANCIAL PRESSURE TO SELL HOME BY RACE

	White		Nonwhite		Total State	
Financial Pressure	No.	%	No.	%	No.	%
Yes	83	8.6	11	8.0	93	8.6
No	679	70.9	75	56.8	754	69.2
Don't Know	196	20.5	47	35.2	243	22.3

Chi Square significant at the .0007 level.
Number of responses 1090.

TABLE 40

FINANCIAL PRESSURE TO SELL HOME BY INCOME

Financial Pressure	$0- 3,999	$4,000 -6,999	$7,000 -9,999	$10,000 14,999	$15,000 -19,999	$20,000 -29,999	$30,000+	TOTAL STATE
Yes	13.0	13.4	14.6	5.8	8.1	9.4	--	9.4
No	60.1	55.1	60.1	65.3	75.5	82.3	93.2	68.0
Don't Know	26.9	31.5	25.3	28.9	16.4	8.3	6.8	22.7

Chi Square significant at the .0001 level.
Number of responses: 838

TABLE 41

FINANCIAL PRESSURE TO SELL HOME BY OWN/RENT

Financial Pressure	Own No.	Own %	Rent No.	Rent %	Other No.	Other %	Total State No.	Total State %
Yes	95	8.6	4	14.4	--	--	99	8.6
No	768	69.5	20	74.9	13	71.8	801	69.7
Don't Know	241	21.8	3	10.8	5	28.2	249	21.7

Chi Square not significant .3382.
Number of responses: 1149.

TABLE 42

PERSONS FEELING FINANCIAL PRESSURE TO MOVE BY HOUSEHOLD

	Live Alone		Two Person Household		Three+ Household		Total State	
Financial Pressure To Move	No.	%	No.	%	No.	%	No.	%
Yes	48	11.1	42	7.1	5	5.2	95	8.4
No	279	64.1	436	74.2	69	67.9	784	69.7
Don't Know	108	24.9	110	18.7	27	27.0	246	21.9

Chi Square significant level .0038.
Number of responses: 1125.

Table 43

REASONS FOR HOMESHARING BY AGE

	<60		60-69		70-79		80+		Total State	
Reasons	No.	%	No.	%	No.	%	No.	%	No.	%
To Help With Chores	19	7.8	33	7.1	46	10.6	15	11.1	112	8.8
To Reduce Cost of Housing	15	6.2	21	4.6	34	7.8	7	5.2	77	6.1
To Feel Safer*	11	4.7	26	5.5	38	8.8	14	10.5	90	7.0
For Companionship	20	8.4	30	6.6	43	9.9	16	11.5	109	8.6
Other Reasons	5	1.9	8	1.8	12	2.7	6	4.5	31	2.4
Not Interested	193	79.6	349	75.6	306	70.8	88	64.2	936	73.5

* Chi Square significant at .0036 level.
Number of responses: 1273

TABLE 44

REASONS FOR HOMESHARING BY RACE

	White		Nonwhite		Total State	
Reasons	No.	%	No.	%	No.	%
To Help With Chores	99	8.9	14	8.1	112	8.8
To Reduce Cost of Housing	69	6.2	8	4.5	76	6.0
To Feel Safer*	70	6.4	18	10.4	88	6.9
For Companionship	91	8.2	18	10.8	109	8.6
Other Reason	27	2.5	5	2.7	32	2.5
Not Interested**	830	75.0	107	64.0	937	73.5

*Chi Square significant at the .05 level.
**Chi Square significant at the .01 level.
Number of responses: 1274.

TABLE 45

REASONS FOR HOME SHARING BY INCOME

Reasons	$0- 3,999	$4,000 -6,999	$7,000 -9,999	$10,000 14,999	$15,000 -19,999	$20,000 -29,999	$30,000+	TOTAL STATE
To Help With Chores	13.0	9.1	5.7	13.3	6.4	8.4	93.2	90.9
To Reduce Cost of Housing	9.2	7.9	*.2	5.9	7.4	2.8	1.7	6.4
To Feel Safe	15.0	9.5	7.7	7.1	8.3	3.7	1.7	7.6
For Companionship	14.5	7.0	7.3	11.0	8.3	7.5	6.0	8.4
Other Reason	5.6	3.7	1.9	2.8	--	3.7	--	2.6
Not Interested*	64.5	67.4	73.2	73.2	82.5	79.5	81.3	73.7

*Chi Square significant at the .05 level.
Number of responses: 976

TABLE 46

REASONS FOR HOMESHARING BY OWN\RENT

	Own		Rent		Other		Total State	
Reasons	No.	%	No.	%	No.	%	No.	%
To Help With Chores	106	8.7	8	7.3	4	14.5	117	8.7
To Reduce Cost of Housing*	67	5.6	11	11.0	3	12.5	82	6.1
To Feel Safer	83	6.7	6	5.5	3	12.5	92	6.9
For Companionship	100	8.3	13	12.4	2	9.0	115	8.6
Other Reason**	28	2.3	2	1.8	1	3.5	31	2.3
Not Interested*	896	74.0	71	68.5	17	61.2	983	73.3

*Chi Square significant at the .05 level.
**Chi Square significant at the .01 level.t
Number of responses: 1341.

TABLE 47

REASONS FOR SHARING HOME BY NUMBER IN HOUSEHOLD

	Live Alone		Two Person Household		Three+ Household		Total State	
Reasons	No.	%	No.	%	No.	%	No.	%
To Help With Chores*	59	11.1	43	6.6	11	9.4	113	8.7
To Reduce Cost of Housing	37	6.9	34	5.1	10	8.6	80	6.1
To Feel Safer	45	8.3	37	5.6	8	6.6	89	6.8
For Companionship**	67	12.5	37	5.7	10	8.7	114	8.7
Other Reason	17	3.1	8	1.3	3	2.9	28	2.2
Not Interested***	360	67.5	525	79.8	81	69.8	967	73.9

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*Chi Square significant at the .05 level.
**Chi Square significant at the .001 level.
***Chi Square significant at the .0001 level.
Number of responses: 1308.

Table 48

HOMESHARING PREFERENCES BY AGE

	<60		60-69		70-79		80+		Total State	
Preference	No.	%	No.	%	No.	%	No.	%	No.	%
Share Own Home	21	9.0	17	4.1	33	8.3	14	12.0	86	7.3
Share Someone Else's	3	1.2	8	1.9	5	1.2	4	3.6	20	1.7
Not Interested	211	89.8	405	94.1	358	90.4	101	84.4	1075	91.0

Chi Square significant at the .0138 level.
Number of responses: 1182

TABLE 49

HOMESHARING PREFERENCES BY RACE

	White		Nonwhite		Total State	
Preference	**No.**	**%**	**No.**	**%**	**No.**	**%**
Share Own Home	74	7.1	12	8.5	86	7.3
Share Someone Else's	14	1.4	6	4.3	20	1.7
Not Interested	952	91.5	123	87.2	1075	91.0

Chi Square significant at the .05 level.
Number of responses: 1182.

TABLE 50

HOMESHARING PREFERENCES BY INCOME

Preference	$0- 3,999	$4,000 -6,999	$7,000 -9,999	$10,000 14,999	$15,000 -19,999	$20,000 -29,999	$30,000+	TOTAL STATE
Share Own Home	12.6	7.7	7.1	8.2	8.8	6.8	3.4	7.6
Share Someone Else's	6.3	1.6	3.3	1,8	1.0	--	--	1.8
Not Interested	81.0	90.7	89.6	90.0	90.3	93.2	96.6	90.6

Chi Square not significant .0704.
Number of responses: 906

TABLE 51

HOMESHARING PREFERENCES BY OWN\RENT

	Own		Rent		Other		Total State	
Preference	No.	%	No.	%	No.	%	No.	%
Share Own Home	86	7.5	7	7.6	1	3.6	93	7.5
Share Someone Else's	18	1.6	1	1.1	4	16.5	23	1.8
Not Interested	1033	90.9	79	91.3	21	79.9	1133	90.7

Chi Square significant at the .0000 level.

TABLE 52

HOMESHARING PREFERENCES BY NUMBER IN HOUSEHOLD

	Live Alone		Two Person Household		Three+ Household		Total State	
Preference	No.	%	No	%	No.	%	No.	%
Share Own Home	47	9.7	31	4.9	10	9.2	88	7.2
Share Someone Else's	15	3.1	5	.7	3	2.3	22	1.8
Not Interested	424	87.2	592	94.3	96	88.5	1122	91.0

Chi Square significant at the .0007 level.

Number of response: 1222.

Table 53

AGE PREFERENCES OF PERSONS INTERESTED IN HOMESHARING BY AGE

	<60		60-69		70-79		80+		Total Stat	
Age Preference	No.	%	No.	%	No.	%	No.	%	No.	%
About the Same Age	20	72.6	18	68.9	24	50.8	9	51.7	70	60.1
Someone Younger	6	20.6	6	23.9	18	38.7	8	48.3	38	32.5
Someone Older	2	6.9	2	7.2	5	10.5	--	--	9	7.4

Chi Square not significant .2866.
Number of responses 117

TABLE 54

AGE PREFERENCES OF PERSONS INTERESTED IN HOMESHARING BY RACE

	White		Nonwhite		Total State	
Age Preference	No.	%	No.	%	No.	%
About the Same Age	61	61.9	9	50.0	70	60.1
Someone Younger	32	32.4	6	33.3	38	32.5
Someone Older	6	5.7	3	16.7	9	7.4

Chi Square not significant.
Number of responses: 117.

TABLE 55

AGE PREFERENCES OF PERSONS INTERESTED IN HOMESHARING BY INCOME

Age Preference	$0- 3,999	$4,000 -6,999	$7,000 -9,999	$10,000 14,999	$15,000 -19,999	$20,000 -29,999	$30,000+	TOTAL STATE
About the Same Age	70.1	48.4	50.0	66.7	80.0	75.0	50.0	61.1
Someone Younger	6.5	45.0	33.3	28.3	20.0	25.0	50.0	29.6
Someone Older	23.4	6.7	16.7	5.1	--	--	--	9.3

Chi Square not significant .3007.
Number of responses: 93

TABLE 56

AGE PREFERENCES OF PERSONS INTERESTED IN HOMESHARING BY OWN\RENT

	Own		Rent		Other		Total State	
Age Preference	No.	%	No.	%	No.	%	No.	%
About the Same Age	70	62.4	3	42.9	2	22.0	74	59.2
Someone Younger	35	31.1	4	57.1	4	64.2	43	34.3
Someone Older	7	6.4	--	--	1	13.8	8	6.5

Chi Square not significant .1863.
Number of responses: 125.

TABLE 57

AGE PREFERENCES OF PERSONS INTERESTED IN LIVING WITH ANOTHER PERSON BY NUMBER IN HOUSEHOLD

	Live Alone		Two Person Household		Three+ Household		Total State	
Age Preference	No.	%	No.	%	No.	%	No.	%
About the Same Age	34	56.6	29	65.0	6	41.7	69	58.0
Someone Younger	24	39.4	13	28.7	5	37.7	42	35.2
Someone Older	2	4.0	3	6.3	3	20.6	8	6.8

Chi Square not significant .1634.
Number of responses: 120.

Table 58

ADDITIONAL RESOURCES FOR REMAINING AT HOME BY AGE

	<60		60-69		70-79		80+		Total State	
Additional Resources	No.	%	No.	%	No.	%	No.	%	No.	%
Yes	31	14.1	72	17.3	99	26.9	38	34.4	239	21.
No	168	77.3	284	68.5	223	60.8	59	53.5	734	66.
Don't know	19	8.6	59	14.2	45	12.3	13	12.1	136	12.

Chi Square significant at the .0001 level.
Number of responses: 1109

TABLE 59

ADDITIONAL RESOURCES FOR REMAINING AT HOME BY RACE

	White		Nonwhite		Total State	
Additional Resources	No.	%	No.	%	No.	%
Yes	194	19.8	45	33.3	239	21.5
No	661	67.7	75	55.6	736	66.2
Don't Know	121	12.4	15	11.1	136	12.3

Chi Square significant at the .0016 level.
Number of responses: 1111.

TABLE 60

ADDITIONAL RESOURCES FOR REMAINING AT HOME BY INCOME

Additional Resources	$0- 3,999	$4,000 -6,999	$7,000 -9,999	$10,000 14,999	$15,000 -19,999	$20,000 -29,999	$30,000+	TOTAL STATE
Yes	33.9	39.4	22.0	17.6	15.1	11.7	10.6	22.9
No	46.9	50.0	64.9	68.7	74.1	78.8	78.5	64.8
Don't Know	19.2	10.7	13.1	13.7	10.8	9.6	10.9	12.3

Chi Square significant at the .0001 level.
Number of responses: 856

TABLE 61

ADDITIONAL RESOURCES FOR REMAINING AT HOME BY OWN/RENT

	Own		Rent		Other		Total State	
	No.	%	No.	%	No.	%	No.	%
Yes	225	21.2	16	19.2	7	30.6	248	21.2
No	700	65.9	64	75.7	13	57.1	777	66.4
Don't Know	138	12.9	4	5.1	3	12.3	145	12.4

Chi Square not Significant.

Number of Responses: 1170.

TABLE 62

ADDITIONAL RESOURCES FOR REMAINING AT HOME BY NUMBER IN HOUSEHOLD

	Live Alone		Two Person Household		Three + Household		Total State	
Additional Resources	No.	%	No.	%	No.	%	No.	%
Yes	126	27.6	104	17.7	17	16.8	247	21.6
No	278	61.0	408	69.6	70	67.7	757	66.0
Don't Know	52	11.4	74	12.7	16	15.5	142	12.4

Chi Square significant at the .0020 level.
Number of Responses: 1146.

Table 63

NUMBER OF ROOMS BY AGE

	<60		60-69		70-79		80+		Total State	
Number of Rooms	No.	%	No.	%	No.	%	No.	%	No.	%
Three or less	9	3.6	24	5.3	29	6.7	11	8.9	72	5.8
Four	35	14.6	66	14.7	94	22.2	29	22.8	224	18.1
Five	74	30.8	172	38.2	144	34.1	41	32.4	431	34.8
Six	59	24.5	108	24.1	106	25.1	29	22.9	302	24.4
Seven	39	16.4	44	9.8	28	6.7	8	6.4	119	9.6
Eight or more	24	10.1	36	7.9	22	5.3	8	6.7	90	7.3

Chi Square significant at the .0005 level.
Number of responses: 1239

TABLE 64

NUMBER OF ROOMS IN HOUSE BY RACE

	White		Nonwhite		Total State	
Number of Rooms	No.	%	No.	%	No.	%
Three or Less	57	5.3	15	9.3	72	5.8
Four Rooms	193	17.9	30	18.7	223	18.0
Five Rooms	385	35.7	47	29.0	432	34.8
Six Rooms	258	24.0	44	27.1	302	24.4
Seven Rooms	105	9.8	15	9.3	120	9.7
Eight or More	80	7.4	11	6.5	90	7.3

Chi Square not significant .2601.
Number of responses: 1240.

TABLE 65

ROOMS BY INCOME

Number of Rooms	$0- 3,999	$4,000 -6,999	$7,000 -9,999	$10,000 14,999	$15,000 -19,999	$20,000 -29,999	$30,000+	TOTAL STATE
Three or Less	17.4	9.7	7.2	3.4	1.9	2.8	2.6	6.3
Four Rooms	25.2	30.0	22.9	15.1	22.3	9.3	3.5	19.4
Five Rooms	26.8	36.3	38.9	45.4	33.6	2.8	2.6	6.3
Six Rooms	22.2	19.5	22.5	21.3	27.8	27.2	29.4	23.4
Seven Rooms	5.8	2.6	6.9	8.0	9.8	18.7	22.1	9.3
Eight or More	2.5	1.9	1.7	6.8	4.6	12.1	26.0	7.1

Chi Square significant at the .0001 level.
Number of responses: 952

TablE 66

NUMBER OF ROOMS IN HOUSE BY OWN/RENT

	Own		Rent		Other		Total State	
Number of Rooms	No.	%	No.	%	No.	%	No.	%
Three or less	30	2.5	41	41.2	4	14.9	74	5.7
Four	195	16.5	31	31.6	6	22.3	232	17.8
Five	428	36.2	17	17.2	6	24.6	451	34.5
Six	307	26.0	8	7.6	5	21.1	320	24.5
Seven	128	10.9	1	.9	2	7.4	131	10.0
Eight or more	94	7.9	2	1.5	2	9.7	97	7.5

Chi Square significant at the .0001 level.

Number of responses: 1307.

TABLE 67

NUMBER OF ROOMS BY NUMBER IN HOUSEHOLD

	Live Alone		Two Person Household		Three+ Household		Total State	
Number of Rooms	No.	%	No.	%	No.	%	No.	%
Three or Less	56	10.8	12	1.8	5	4.0	73	5.7
Four Rooms	115	22.1	96	14.8	15	13.3	226	17.6
Five Rooms	180	34.8	231	35.7	29	26.2	441	34.5
Six Rooms	105	20.3	186	28.7	23	20.9	315	24.6
Seven Rooms	37	7.1	72	11.1	19	17.1	128	10.0
Eight or More	26	4.9	51	7.9	21	18.4	97	7.6

Chi Square significant at the .0001 level.

Number of responses: 11279.

Table 68

NUMBER OF BEDROOMS BY AGE

	<60		60-69		70-79		80+		Total State	
No. of Bedrooms	No.	%	No.	%	No.	%	No.	%	No.	%
None	1	.4	8	1.7	8	1.9	1	.7	18	1.4
One	7	2.7	30	6.4	33	7.7	17	12.7	87	6.8
Two	73	30.2	155	33.6	194	44.9	70	50.8	492	38.6
Three	123	50.9	224	48.5	172	39.7	44	31.7	562	44.2
Four or more	38	15.8	45	9.8	25	5.8	6	4.1	114	9.0

Chi Square significant at the .0001 level.
Number of responses: 1273

TABLE 69

NUMBER OF BEDROOMS BY RACE

Number of Bedrooms	White		Nonwhite		Total State	
	No.	%	No.	%	No.	%
Zero	13	1.2	5	2.7	18	1.4
One Bedroom	70	6.4	17	9.9	87	6.8
Two Bedrooms	435	39.3	56	33.3	491	38.5
Three Bedrooms	491	44.3	74	44.1	564	44.3
Four+ Bedrooms	98	8.8	17	9.9	114	9.0

Chi Square not isgnificant .1596.
Number of responses: 1274.

TABLE 70

NUMBER OF BEDROOMS BY INCOME

Number of Bedrooms	$0- 3,999	$4,000 -6,999	$7,000 -9,999	$10,000 14,999	$15,000 -19,999	$20,000 -29,999	$30,000+	TOTAL STATE
Zero	3.1	1.4	1.9	1.4	1.8	.9	--	1.5
One Bedroom	14.2	12.8	8.6	5.5	4.6	4.7	--	7.6
Two Bedrooms	43.7	48.5	46.0	37.7	39.2	31.7	18.7	39.4
Three Bedrooms	35.3	33.7	35.9	46.6	48.3	48.7	56.1	42.4
Four + Bedrooms	3.6	3.6	7.7	8.8	6.1	14.0	25.2	9.1

Chi Square significant at the .0001 level.
Number of responses: 976

TABLE 71

NUMBER OF BEDROOMS BY OWN\RENT

Number of Bedrooms	Own		Rent		Other		Total State	
	No.	%	No.	%	No.	%	No.	%
Zero	16	1.3	1	.9	--	--	17	1.3
One Bedroom	43	3.6	42	40.2	5	17.3	89	6.7
Two Bedrooms	451	37.2	49	47.4	9	34.7	509	37.9
Three Bedrooms	586	48.4	11	10.6	9	32.1	605	45.1
Four+ Bedrooms	115	9.5	1	.9	4	15.9	120	9.0

Chi Square significant at the .0001 level.
Number of responses: 1341.

TABLE 72

NUMBER OF BEDROOMS BY NUMBER IN HOUSEHOLD

	Live Alone		Two Person Household		Three+ Household		Total State	
Number of Bedrooms	No.	%	No.	%	No.	%	No.	%
Zero	5	1.0	8	1.2	2	1.6	15	1.1
One Bedroom	66	12.3	20	3.0	2	1.3	87	6.7
Two Bedrooms	253	47.4	230	34.9	19	16.0	501	38.3
Three Bedrooms	179	33.6	350	53.1	58	50.1	587	44.9
Four+ Bedrooms	30	5.7	51	7.8	36	30.9	117	9.0

Chi Square significant at the .0001 level.

Number of responses: 1308.

TABLE 73

HOMES WITH INDOOR PLUMBING BY AGE

	<60		60-69		70-79		80+		Total State	
Presence of Indoor Plumbing	No.	%	No.	%	No.	%	No.	%	No.	%
Yes	239	99.6	450	99.0	429	99.4	132	97.5	1249	99.1
No	1	.4	4	1.0	2	.6	3	2.5	11	.9

Chi Square not significant .1559.

Number of responses: 1261.

TABLE 74

HOMES WITH INDOOR PLUMBING BY RACE

Indoor Plumbing	White		Nonwhite		Total State	
	No.	%	No.	%	No.	%
Yes	1091	99.4	159	97.2	1250	99.1
No	7	.6	5	2.8	11	.9

Chi Square significant at the .0213 level.
Number of responses: 1261.

TABLE 75

HOMES WITH INDOOR PLUMBING BY INCOME

Indoor Plumbing	$0- 3,999	$4,000 -6,999	$7,000 -9,999	$10,000 14,999	$15,000 -19,999	$20,000 -29,999	$30,000+	TOTAL STATE
Yes	97.6	98.3	99.4	98.8	100.0	100.0	98.3	98.9
No	2.4	1.7	.6	1.2	--	--	1.7	1.1

Chi Square not significant .5749
Number of responses: 967

TABLE 76

HOMES WITH INDOOR PLUMBING BY OWN\RENT

	Own		Rent		Other		Total State	
Indoor Plumbing	No.	%	No.	%	No.	%	No.	%
Yes	1191	99.2	102	100.0	24	92.8	1318	99.1
No	10	.8	--	--	2	7.2	12	.9

Chi Square significant at the .0020 level
Number of responses: 1330.

TABLE 77

HOMES WITH INDOOR PLUMBING BY NUMBER IN HOUSEHOLD

	Live Alone		Two Person Household		Three+ Household		Total State	
Indoor Plumbing	No.	%	No.	%	No.	%	No.	%
Yes	520	98.9	649	99.3	115	98.7	1284	99.1
No	6	1.1	5	.7	2	1.3	12	.9

Chi Square not significant .7127 level.

Number of responses: 1296.

Table 78

HOMES WITH COMPLETE BATHROOM FACILITIES BY AGE

Presence of Complete Bath	<60		60-69		70-79		80+		Total State	
	No.	%	No.	%	No.	%	No.	%	No.	%
Yes	225	98.9	410	98.5	353	98.1	109	95.2	1096	98.1
No	2	1.1	6	1.5	7	1.9	5	4.8	21	1.9

Chi Square not significant .1017.
Number of responses: 1117

TABLE 79

HOMES WITH COMPLETE BATHROOM FACILITIES BY RACE

	White		Nonwhite		Total State	
Complete Bathroom Facilities	No.	%	No.	%	No.	%
Yes	969	99.3	129	90.5	1098	98.2
No	7	.7	14	9.5	20	1.8

Chi Square significant at the ..0001 level.
Number of responses: 1118.

TABLE 80

HOMES WITH COMPLETE BATHROOMS BY INCOME

Complete Bathroom Facilities	$0- 3,999	$4,000 -6,999	$7,000 -9,999	$10,000 14,999	$15,000 -19,999	$20,000 -29,999	$30,000+	TOTAL STATE
Yes	94.9	96.9	97.4	98.3	97.9	100.0	100.0	97.9
No	5.1	3.1	2.6	1.7	2.1	--	--	2.1

Chi Square not significant .2054
Number of responses: 862

TABLE 81

HOMES WITH COMPLETE BATHROOM FACILITIES BY OWN/RENT

	Own		Rent		Other		Total State	
	No.	%	No.	%	No.	%	No.	%
Yes	1051	98.3	89	98.9	21	86.1	1161	98.1
No	18	1.7	1	1	1.1	3	22	1.9

Chi Square significant at the .0001 level.

Number of responses: 1183.

TABLE 82

HOMES WITH COMPLETE BATHROOM FACILITIES BY NUMBER IN HOUSEHOLD

Complete Bathroom Facilities	Live Alone		Two Person Household		Three+ Household		Total State	
	No.	%	No.	%	No.	%	No.	%
Yes	452	98.2	591	99.1	98	94.7	1141	98.4
No	8	1.8	5	.9	5	5.3	19	1.6

Chi Square significant at the .0050 level.

Number of responses: 1160.

Table 83

NUMBER OF BATHROOMS BY AGE

	<60		60-69		70-79		80+		Total State	
Number of Baths	No.	%	No.	%	No.	%	No.	%	No.	%
None	5	1.9	17	3.6	15	3.5	7	5.2	44	3.4
One	132	54.5	232	50.3	275	63.7	96	69.6	735	57.7
Two	88	36.2	180	38.9	121	28.1	32	23.1	420	33.0
Three or more	18	7.4	33	7.2	20	4.7	3	2.1	74	5.8

Chi Square significant at the .0001 level.
Number of responses: 1273

TABLE 84

NUMBER OF BATHROOMS BY RACE

Number of Bathrooms	White		Nonwhite		Total State	
	No.	%	No.	%	No.	%
Zero	35	3.1	9	5.4	44	3.4
One	607	54.8	128	76.6	735	57.7
Two	396	35.7	26	15.3	421	33.1
Three+	70	6.3	5	2.7	74	5.8

Chi Square significant at the .0001 level.
Number of responses: 1274.

TABLE 85

NUMBER OF BATHROOMS BY INCOME

Number of Bathrooms	$0- 3,999	$4,000 -6,999	$7,000 -9,999	$10,000 14,999	$15,000 -19,999	$20,000 -29,999	$30,000+	TOTAL STATE
Zero	5.6	4.2	1.3	4.0	4.6	--	.9	3.1
One Bathroom	86.5	83.5	72.8	56.0	48.9	33.6	15.8	60.0
Two Bathrooms	6.8	12.3	25.3	37.3	41.9	55.2	57.0	31.6
Three+ Bathrooms	1.2	--	.6	2.6	4.6	11.2	26.4	5.4

Chi Square significant at the .0001 level.
Number of responses: 976

TABLE 86

NUMBER OF BATHROOMS BY OWN/RENT

	Own		Rent		Other		Total State	
Number of Bathrooms	No.	%	No.	%	No.	%	No.	%
Zero	40	3.3	4	4.3	2	6.9	46	3.5
One	656	54.2	85	82.0	20	72.1	761	56.7
Two	433	35.8	14	13.7	5	17.6	452	33.7
Three+	81	6.7	--	--	1	1.1	82	6.1

Chi Square significant at the .0001 level.
Number of responses: 1341.

TABLE 87

NUMBER OF BATHROOMS BY NUMBER IN HOUSEHOLD

	Live Alone		Two Person Household		Three+ Household		Total State	
Number of Bathrooms	No.	%	No.	%	No.	%	No.	%
Zero	22	4.2	17	2.6	5	4.2	44	3.4
One	357	66.9	326	49.5	58	50.2	741	56.6
Two	142	26.6	261	39.7	38	32.9	442	33.8
Three+	12	2.3	54	8.2	15	12.6	81	6.2

Chi Square significant at the .0001 level.

Number of responses: 1308.

Table 88

USE OF BATHROOMS BY AGE

	<60		60-69		70-79		80+		Total State	
Use of Bathrooms	No.	%	No.	%	No.	%	No.	%	No.	%
Household only	236	98.8	445	98.8	413	99.1	129	97.9	1223	98.8
Another household also	2	.8	3	.6	3	.7	2	1.4	9	.8
No bathroom	1	.4	2	.5	1	.2	1	.7	5	.4

Chi Square not significant .9428.
Number of responses: 1237

TABLE 89

USE OF BATHROOMS BY RACE

	White		Nonwhite		Total State	
Used By	No.	%	No.	%	No.	%
Household Only	1066	98.8	158	99.1	1223	98.8
Another Household Also	9	.9	0	--	9	.8
No Bathroom	4	.3	2	.9	5	.4

Chi Square not significant .2807.
Number of responses: 1238.

TABLE 90

USE OF BATHROOMS BY INCOME

Used By	$0- 3,999	$4,000 -6,999	$7,000 -9,999	$10,000 14,999	$15,000 -19,999	$20,000 -29,999	$30,000+	TOTAL STATE
Household Only	96.3	98.8	99.4	98.8	100.0	100.0	99.1	99.0
Another Household Also	1.2	.8	--	.5	--	--	.9	.5
No Bathroom	2.5	.4	.6	.8	--	--	--	.6

Chi Square not significant .5693.
Number of responses: 955

TABLE 91

USE OF BATHROOMS BY OWN\RENT

	Own		Rent		Other		Total State	
Used By	No.	%	No.	%	No.	%	No.	%
Household Only	1165	98.8	100	100.0	24	92.8	1289	98.8
Another Household Also	9	100.0	--	--	--	--	9	.7
No Bathroom	4	.4	--	--	2	7.2	6	.5

Chi Square significant at the .0001 level.
Number of responses: 1305.

TABLE 92

USE OF BATHROOMS BY NUMBER IN HOUSEHOLD

Used By	Live Alone No.	Live Alone %	Two Person Household No.	Two Person Household %	Three+ Household No.	Three+ Household %	Total State No.	Total State %
Household Only	510	99.1	638	98.5	109	97.8	1257	98.7
Another Household Also	3	.6	7	1.0	1	.8	10	.8
No Bathroom	2	.4	3	.4	2	1.3	6	.5

Chi Square not significant .6293.

Number of responses: 1274.

Table 93

BREAKDOWN IN FLUSH TOILET BY AGE

	<60		60-69		70-79		80+		Total State	
Breakdown in Toilet	No.	%	No.	%	No.	%	No.	%	No.	%
Yes	14	5.9	24	5.2	27	6.4	6	4.7	70	5.7
No	222	93.7	424	93.7	391	93.1	125	95.3	1161	93.7
No flush toilet	1	.4	5	1.1	2	.6	--	--	8	.7

Chi Square not significant .7972.
Number of responses: 1240

TABLE 94

BREAKDOWN IN FLUSH TOILET BY RACE

Breakdown in Toilet	White		Nonwhite		Total State	
	No.	%	No.	%	No.	%
Yes	48	4.4	23	14.2	70	5.7
No	1030	95.2	132	83.0	1162	93.7
No Flush Toilets	4	.3	5	2.8	8	.7

Chi Square significant at the .0001 level.
Number of responses: 1241.

TABLE 95

BREAKDOWN IN FLUSH TOILET BY INCOME

Breakdown in Toilet	$0- 3,999	$4,000 -6,999	$7,000 -9,999	$10,000 14,999	$15,000 -19,999	$20,000 -29,999	$30,000+	TOTAL STATE
Yes	8.4	8.7	7.2	4.1	5.3	2.8	1.7	5.7
No	88.4	89.8	92.2	95.1	94.7	97.2	98.3	93.4
No Flush Toilets	3.2	1.5	.6	.8	--	--	--	.9

Chi Square not significant .0618.
Number of responses: 958

TABLE 96

BREAKDOWN IN FLUSH TOILET BY OWN\RENT

	Own		Rent		Other		Total State	
Breakdown	No.	%	No.	%	No.	%	No.	%
Yes	68	5.8	3	3.5	1	3.6	72	5.6
No	1105	93.5	94	96.5	24	92.8	1223	93.7
No Flush Toilets	8	.7	--	--	1	3.6	9	.7

Chi Square not significant .3008.
Number of responses: 1305.

TABLE 97

BREAKDOWN IN FLUSH TOILET BY NUMBER IN HOUSEHOLD

	Live Alone		Two Person Household		Three+ Household		Total State	
Breakdown in Toilet	No.	%	No.	%	No.	%	No.	%
Yes	24	4.6	39	5.9	10	9.2	73	5.7
No	482	94.7	609	93.6	101	89.5	1192	93.7
No Flush Toilets	3	.7	3	.4	2	1.3	8	.6

Chi Square not significant .2815.

Number of responses: 1272.

Table 98

COMPLETE KITCHEN FACILITIES BY AGE

	<60		60-69		70-79		80+		Total State	
Complete Kitchen	No.	%	No.	%	No.	%	No.	%	No.	%
Yes	233	98.3	441	98.4	411	98.3	129	96.4	1215	98.1
No	4	1.7	7	1.6	7	1.7	5	3.6	23	1.9

Chi Square not significant .4776.
Number of responses: 1239

TABLE 99

COMPLETE KITCHEN FACILITIES BY RACE

	White		Nonwhite		Total State	
Complete Kitchen	**No.**	**%**	**No.**	**%**	**No.**	**%**
Yes	1073	99.2	143	90.5	1216	98.1
No	8	.8	15	9.5	23	1.9

Chi Square significant at the .0001 level.
Number of responses: 1239.

TABLE 100

COMPLETE KITCHEN FACILITIES BY INCOME

Complete Kitchen Facilities	$0- 3,999	$4,000 -6,999	$7,000 -9,999	$10,000 14,999	$15,000 -19,999	$20,000 -29,999	$30,000+	TOTAL STATE
Yes	96.3	96.2	96.7	98.7	100.0	100.0	100.0	98.0
No	3.7	3.8	3.3	1.3	--	--	--	2.0

Chi Square significant at the .0386 level.
Number of responses: 955

TABLE 101

COMPLETE KITCHEN FACILITIES BY OWN\RENT

Complete Kitchen	Own		Rent		Other		Total State	
	No.	%	No.	%	No.	%	No.	%
Yes	1157	98.1	98	100.0	24	87.5	1279	98.0
No	22	1.9	--	--	3	12.5	26	2.0

Chi Square significant at the.0002 level.
Number of responses: 1304.

TABLE 102

COMPLETE KITCHEN FACILITIES BY NUMBER IN HOUSEHOLD

	Live Alone		Two Person Household		Three+ Household		Total State	
Complete Kitchen	No.	%	No.	%	No.	%	No.	%
Yes	505	97.7	637	98.9	106	93.5	1247	97.9
No	12	2.3	7	1.1	7	6.5	26	2.1

Chi Square significant at the .0010 level.

Number of responses: 1274.

Table 103

USE OF KITCHEN FACILITIES BY AGE

	<60		60-69		70-79		80+		Total State	
Use of kitchen	No.	%	No.	%	No.	%	No.	%	No.	%
Household only	236	100	447	98.9	412	99.2	134	98.9	1229	99.2
Another household also			2	.4	1	.2	2	1.1	4	.3
No complete kitchen			3	.7	2	.6			5	.4

Chi Square not significant .4600.
Number of responses: 1239

TABLE 104

USE OF KITCHEN FACILITIES BY RACE

	White		Nonwhite		Total State	
Used By	No.	%	No.	%	No.	%
Household Only	1080	99.7	150	96.2	1230	99.9
Another Household Also	3	.3	2	1.0	4	.3
No Complete Kitchen	1	.1	5	2.9	5	.4

Chi Square Significant at the .0001 level.
Number of responses: 1240.

TABLE 105

USE OF KITCHEN FACILITIES BY INCOME

Used By	$0- 3,999	$4,000 -6,999	$7,000 -9,999	$10,000 14,999	$15,000 -19,999	$20,000 -29,999	$30,000+	TOTAL STATE
Household Only	98.0	98.9	100.0	99.2	100.0	99.1	100.0	99.3
Another Household Also	2.0	--	--	--	--	.9	--	.3
No Complete Kitchen	--	1.1	--	.8	--	--	--	.4

Chi Square not significant .1202.
Number of responses: 956

TABLE 106

USE OF KITCHEN FACILITIES BY OWN/RENT

	Own		Rent		Other		Total State	
Used By	No.	%	No.	%	No.	%	No.	%
Household Only	1173	99.3	99	100.0	26	96.5	1299	99.3
Another Household Also	4	.4	--	--	--	--	4	.3
No Complete Kitchen	5	.4	--	--	1	3.5	5	.4

Chi Square not significant .1358.
Number of responses: 1308.

TABLE 107

USE OF KITCHEN FACILITIES BY NUMBER IN HOUSEHOLD

	Live Alone		Two Person Household		Three+ Household		Total State	
Used By	No.	%	No.	%	No.	%	No.	%
Household Only	513	99.4	646	99.4	109	97.3	1268	99.2
Another Household Also	2	.3	3	.4	0	--	4	.3
No Complete Kitchen	2	.3	1	.1	3	2.7	5	.4

Chi Square significant at the .0038 level.

Number of responses: 1277.

Table 108

WITHOUT RUNNING WATER BY AGE

	<60		60-69		70-79		80+		Total State	
Without Running Water	No.	%	No.	%	No.	%	No.	%	No.	%
Yes	11	4.7	15	3.4	12	2.9	8	6.2	47	3.8
No	223	95.3	432	96.6	408	97.1	124	93.8	1187	96.2

Chi Square not significant .2716.
Number of responses 1234

TABLE 109

WITHOUT RUNNING WATER BY RACE

	White		Nonwhite		Total State	
Without Water	No.	%	No.	%	No.	%
Yes	30	2.8	17	10.5	47	3.8
No	1047	97.2	141	89.5	1188	96.2

Chi Square significant at the .0001 level.
Number of responses: 1235

TABLE 110

WITHOUT RUNNING WATER BY INCOME

Without Water	$0- 3,999	$4,000 -6,999	$7,000 -9,999	$10,000 14,999	$15,000 -19,999	$20,000 -29,999	$30,000+	TOTAL STATE
Yes	8.8	5.1	5.9	2.4	.9	2.8	--	3.7
No	91.2	94.9	94.1	97.6	99.1	97.2	100.0	96.3

Chi Square significant at the .01 level.
Number of responses: 952

TABLE 111

WITHOUT RUNNING WATER BY OWN/RENT

	Own		Rent		Other		Total State	
Without Water	No.	%	No.	%	No.	%	No.	%
Yes	45	3.8	2	1.9	2	10.0	50	3.8
No	1132	96.2	97	98.1	22	90.0	1251	96.2

Chi Square not significant .1686.
Number of responses: 1301

TABLE 112

WITHOUT RUNNING WATER FOR MORE THAN ONE DAY BY HOUSEHOLD

	Live Alone		Two Person Household		Three+ Household		Total State	
Without Water	No.	%	No.	%	No.	%	No.	%
Yes	14	2.8	27	4.2	6	5.7	48	3.8
No	498	97.2	617	95.8	105	94.3	1221	96.2

Table 113

TYPE OF HOME HEATING BY AGE

	<60		60-69		70-79		80+		Total State	
Type of Heating	No.	%	No.	%	No.	%	No.	%	No.	%
Gas	142	58.5	280	60.7	275	63.6	84	60.9	780	61.3
Propane	30	12.2	63	13.7	68	15.7	25	18.5	186	14.6
Electric	27	11.2	61	13.2	49	11.4	17	12.3	154	12.1
Woodstove*	82	33.7	100	21.7	64	14.8	16	11.5	261	20.5
Coal	2	.8	8	1.7	13	3.1	3	2.1	26	2.0
Oil	--	--	1	.2	2	.4	3	2.1	6	.4
Other**	--	--	12	2.7	4	1.0	2	1.1	18	1.4
No Heat***	--	--	5	1.1	--	--	--	--	-5	.4

*Chi Square significant at the .0001 level.
**Chi Square significant at the .0274 level.
***Chi Square significant at the .0255 level
Number of responses 1273

TABLE 114

TYPE OF HOMEHEATING BY RACE

	White		Nonwhite		Total State	
Type of Heating	No.	%	No.	%	No.	%
Gas	671	60.6	110	65.8	781	61.3
Propane	156	14.1	30	18.0	186	14.6
Electricity***	151	13.7	3	1.8	154	12.1
Wood Stove	228	20.6	33	19.8	261	20.5
Coal	20	1.8	6	3.6	26	2.0
Oil	6	.5	0	--	6	.4
Other	15	1.4	3	1.8	18	1.4
No Heat	4	.3	2	.9	5	.4

Chi Square significant at the .0000 level.

TABLE 115

TYPE OF HOME HEATING BY INCOME

Type of Heating	$0- 3,999	$4,000 -6,999	$7,000 -9,999	$10,000 -14,999	$15,000 -19,999	$20,000 -29,999	$30,000+	TOTAL STATE
Gas	51.0	61.5	56.1	56.3	63.2	62.1	71.1	60.1
Propane*	25.1	18.0	16.3	15.6	13.8	12.7	3.4	15.2
Electricity**	2.4	7.2	8.6	13.6	12.9	16.8	23.8	11.8
Wood Stove	23.2	14.6	25.1	23.2	21.7	23.9	17.9	20.7
Coal	2.4	4.5	1.3	2.2	0.9	0.9	--	2.1
Oil	--	0.8	--	0.5	--	--	--	0.3
Other	1.9	0.8	1.3	1.7	2.8	2.8	1.7	1.7
No Heat	--	--	--	1.2	--	--	0.9	0.3

* Chi Square significant at the .01 level.
** Chi Square significant at the .0001 level.
Number of responses: 976

TABLE 116

TYPE OF HOMEHEATING BY OWN\RENT

	Own		Rent		Other		Total State	
Type of Heating	No.	%	No.	%	No.	%	No.	%
Gas	750	62.0	68	66.1	12	43.7	830	61.9
Propane***	176	14.5	6	5.5	9	33.3	190	14.2
Electricity	146	12.1	13	12.7	4	14.1	163	12.2
Wood Stove**	267	22.1	9	8.8	7	26.5	283	21.1
Coal*	22	1.9	3	2.7	--	--	25	1.9
Oil	5	.4	1	.9	--	--	6	.4
Other	12	1.0	5	4.5	--	--	17	1.2
No Heat	3	.3	--	--	--	--	3	.2

*Chi Square significant at the .05 level.
**Chi Square significant at the .01 level.
***Chi Square significant at the .001 level.

TABLE 117

TYPE OF HOMEHEATING BY NUMBER IN HOUSEHOLD

	Live Alone		Two Person Household		Three+ Household		Total State	
Type of Heating	No.	%	No.	%	No.	%	No.	%
Gas	350	65.5	394	59.8	68	58.1	811	62.0
Propane*	80	14.9	89	13.5	19	16.5	188	14.3
Electricity*	56	10.4	88	13.3	16	13.8	160	12.2
Wood Stove***	71	13.3	172	26.2	36	30.6	279	21.3
Coal	13	2.4	10	1.5	0	--	22	1.7
Oil*	3	.5	2	.3	0	--	5	.4
Other*	3	.6	9	1.4	2	1.6	15	1.6
No Heat*	0	--	4	.7	1	.8	5	.4

*Chi Square significant at the .05 level.
***Chi Square significant at the .0001 level.
Number of responses: 1308.

Table 118

BREAKDOWN IN HEATING BY AGE

	<60		60-69		70-79		80+		Total State	
Breakdown	No.	%	No.	%	No.	%	No.	%	No.	%
Yes	4	1.6	7	1.5	11	2.5	4	2.8	25	2.
No	235	98.4	441	98.2	410	97.2	129	97.2	1215	97.
No Heat	--	--	2	.3	2	.4	--	--	3	.

Chi Square not significant .7887
Number of responses: 1242

TABLE 119

BREAKDOWN IN HEATING SYSTEM FOR MORE THAN ONE DAY BY RACE

	White		Nonwhite		Total State	
Breakdown in Heating System	No.	%	No.	%	No.	%
Yes	22	2.0	3	1.9	25	2.0
No	1061	98.0	155	96.3	1216	97.8
No Heating	0	--	3	1.9	3	.2

Chi Square significant at the .0001 level.
Number of responses: 1243.

TABLE 120

BREAKDOWN IN HEATING SYSTEM BY INCOME

Breakdown in Heat	$0- 3,999	$4,000 -6,999	$7,000 -9,999	$10,000 14,999	$15,000 -19,999	$20,000 -29,999	$30,000+	TOTAL STATE
Yes	1.2	4.1	.6	2.9	.9	2.8	--	2.2
No	98.8	95.2	99.4	96.3	99.1	97.2	100.0	97.5
No Heat	--	.6	--	.8	--	--	--	.3

Chi Square not significant .3137.
Number of responses: 958

TABLE 121

BREAKDOWN IN HEATING SYSTEM BY OWN\RENT

	Own		Rent		Other		Total State	
Breakdown	No.	%	No.	%	No.	%	No.	%
Yes	23	1.9	2	1.9	1	3.5	26	2.0
No	1159	97.8	97	98.1	26	96.5	1182	97.8
No Heating	3	.3	--	--	--	--	3	.2

Chi Square not significant .9580.
Number of responses: 1310.

TABLE 122

BREAKDOWN IN HEATING BY NUMBER IN HOUSEHOLD

Breakdown in Heating System	Live Alone		Two Person Household		Three+ Household		Total State	
	No.	%	No.	%	No.	%	No.	%
Yes	10	1.9	14	2.1	2	1.7	26	2.0
No	510	98.1	632	97.9	108	95.6	1250	97.8
No Heating	0	--	0	--	3	2.7	3	.2

*Chi Square significant at the .0001 level.
Number of responses: 1279.

Table 123

AIR CONDITIONED HOMES BY AGE

	<60		60-69		70-79		80+		Total State	
Airconditioned	No.	%	No.	%	No.	%	No.	%	No.	%
Yes	178	74.7	333	74.2	289	68.4	90	67.4	889	71.6
No	60	25.3	116	25.8	133	31.6	43	32.6	353	28.4

Chi Square not significant .1188.
Number of responses: 1242

TABLE 124

AIR CONDITIONED HOMES BY RACE

	White		Nonwhite		Total State	
Air Conditioned	No.	%	No.	%	No.	%
Yes	818	75.6	72	44.9	890	71.6
No	264	24.4	89	55.1	353	28.4

Chi Square significant at the .0001 level.
Number of responses: 1242.

TABLE 125

AIR CONDITIONED HOMES BY INCOME

Air Conditioned	$0- 3,999	$4,000 -6,999	$7,000 -9,999	$10,000 14,999	$15,000 -19,999	$20,000 -29,999	$30,000+	TOTAL STATE
Yes	33.5	55.3	65.4	76.1	82.4	86.0	93.5	69.7
No	66.5	44.7	34.6	23.9	17.6	14.0	6.5	30.3

Chi Square significant at the .0001 level.
Number of responses: 958

TABLE 126

AIR CONDITONED HOMES BY OWN/RENT

	Own		Rent		Other		Total State	
Air Conditioned	No.	%	No.	%	No.	%	No.	%
Yes	866	73.2	65	66.6	10	38.3	942	71.9
No	318	26.8	33	33.4	17	61.7	367	28.1

Chi Square significant at the .0002 level.
Number of responses: 1309.

TABLE 127

AIRCONDITIONED HOMES BY NUMBER IN HOUSEHOLD

	Live Alone		Two Person Household		Three+ Household		Total State	
Airconditioned	No.	%	No.	%	No.	%	No.	%
Yes	352	68.0	491	75.7	77	68.2	920	71.9
No	166	32.0	158	24.3	36	31.8	359	31.8

Chi Square significant at the .0094 level.

Number of responses: 1279.

Table 128

PROFILE OF HOUSING PROBLEMS BY AGE

	<60		60-69		70-79		80+		Total State	
Problems	No.	%	No.	%	No.	%	No.	%	No.	%
Mice or Rats	79	33.2	134	29.9	128	30.7	37	27.8	379	30.6
Leaks in Roof	26	11.1	40	9.0	39	9.4	20	15.8	126	10.2
Open Cracks or Holes in Walls	23	9.5	31	7.0	44	10.5	15	11.1	113	9.1
Broken Plaster	14	6.0	29	6.5	29	6.9	7	5.0	79	6.4
Loose, Broken or Missing Step	4	1.7	5	1.2	13	3.1	2	1.4	24	1.9

Chi Square not significant for any variable
Range of responses for the five variables: 636-1246

TABLE 129

PROFILE OF HOUSING PROBLEMS BY RACE

	White		Nonwhite		Total State	
Problems	No.	%	No.	%	No.	%
Mice or Rats***	288	26.6	92	57.5	[illegible]9	30.6
Leaks In Roof***	86	8.0	41	25.7	126	10.2
Open Cracks or Holes in Walls***	68	6.3	45	28.0	113	9.1
Broken Plaster***	46	4.2	33	20.6	79	6.4
Loose, Broken or Missing Step***	12	1.1	12	7.3	24	1.9

Chi Square significant at the .0001 level.
Range of number of responses: 1233-1244.

TABLE 130

PROFILE OF HOUSING PROBLEMS BY INCOME

Problems	\$0- 3,999	\$4,000 -6,999	\$7,000 -9,999	\$10,000 14,999	\$15,000 -19,999	\$20,000 -29,999	\$30,000+	TOTAL STATE
Mice or Rats***	53.3	42.0	31.5	31.2	22.9	21.1	14.6	31.8
Leaks in Roof***	35.6	16.8	12.6	6.6	4.4	5.7	3.5	11.6
Cracks or Holes in Walls***	25.5	15.3	10.2	5.8	3.8	5.7	2.6	9.8
Broken Plaster***	21.0	10.8	8.5	3.7	1.9	2.8	2.6	7.1
Loose, Broken or Missing Step*	5.7	4.6	1.7	.8	1.9	--	--	2.2

*Chi Square significant at the .01 level.
***Chi Square significant at the .0001 level.
Range of responses: 948-960

TABLE 131

PROFILE OF HOUSING PROBLEMS BY OWN\RENT

	Own		Rent		Other		Total State	
Problem	No.	%	No.	%	No.	%	No.	%
Mice or Rats*	369	31.2	18	17.9	10	36.7	396	30.3
Leaks in Roof*	125	10.6	3	3.5	5	18.3	133	10.2
Open Cracks or Holes in Wall	110	9.3	4	4.4	2	5.5	116	8.9
Broken Plaster*	82	6.9	--	--	2	9.0	85	6.5
Loose, Broken or Missing Step	23	1.9	1	1.0	1	3.5	25	1.9

Chi Square significant at the .05 level.
Range of number of responses: 129u-1312.

TABLE 132

PROFILE OF HOUSING PROBLEMS BY NUMBER IN HOUSEHOLD

	Live Alone		Two Person Household		Three+ Household		Total State	
Problems	No.	%	No.	%	No.	%	No.	%
Mice or Rats (1274)	152	29.5	190	29.5	44	39.3	387	30.4
Leaks in Roof** (1266)	57	11.2	54	8.3	19	17.4	130	10.3
Open cracks or Holes in Walls*** (1273)	60	11.6	39	6.0	19	16.8	117	9.2
Broken Plaster* (1277)	35	6.7	34	5.2	14	12.0	82	6.4
Loose, Broken or Missing Step (1280)	14	2.6	9	1.3	4	3.5	26	2.0

*Chi Square significant at the .05 level.
**Chi Square significant at the .001 level.
***Chi Square significant at the .0001 level.
Range of number of responses: 1266-1280.

Table 133

CONCEALED WIRING BY AGE

	<60		60-69		70-79		80+		Total State	
Concealed Wiring	No.	%	No.	%	No.	%	No.	%	No.	%
Yes	226	94.7	417	92.4	383	91.0	118	89.1	1144	92.0
No	11	4.6	34	7.6	38	9.0	14	10.9	98	7.9
No electricity	2	.6								

Chi Square significant at the .0583 level.
Number of responses: 1243

TABLE 134

CONCEALED WIRING BY RACE

	White		Nonwhite		Total State	
Concealed Wiring	No.	%	No.	%	No.	%
Yes	1027	94.7	117	73.6	1144	92.0
No	57	5.3	41	25.5	98	7.9
No Electricity	0	--	2	.9	2	.1

Chi Square signficant at the .0001 level.
Number of responses: 1244

TABLE 135

CONCEALED WIRING BY INCOME

Concealed Wiring	$0- 3,999	$4,000 -6,999	$7,000 -9,999	$10,000 14,999	$15,000 -19,999	$20,000 -29,999	$30,000+	TOTAL STATE
Yes	77.3	88.4	89.7	97.0	94.3	98.1	95.7	91.9
No	20.8	11.6	10.3	3.0	5.7	1.9	4.3	7.9
No Electricity	2.0	--	--	--	--	--	--	.2

Chi Square significant at the .0001 level.
Number of responses: 959

TABLE 136

CONCEALED WIRING BY OWN\RENT

	Own		Rent		Other		Total State	
Concealed Wiring	No.	%	No.	%	No.	%	No.	%
Yes	1100	92.7	88	91.9	22	80.6	1210	92.4
No	85	7.2	8	8.1	5	19.4	98	7.5
No Electricity	2	.1	--	--	--	--	2	.1

Chi Square not significant .2093.
Number of responses: 1310

TABLE 137

CONCEALED WIRING BY NUMBER IN HOUSEHOLD

Concealed Wiring	Live Alone		Two Person Household		Three+ Household		Total State	
	No.	%	No.	%	No.	%	No.	%
Yes	470	91.6	611	93.7	103	90.9	1183	92.6
No	43	8.4	40	6.1	10	9.1	93	7.3
No Electricity	0	--	2	.2	0	--	2	.1

Chi Square not significant. .3717.

Number of responses: 1278.

Table 138

HOMES WITH INSULATION BY AGE

	<60		60-69		70-79		80+		Total State	
Insulation	No.	%	No.	%	No.	%	No.	%	No.	%
Complete Insulated Yes, complete	111	47.6	173	39.1	170	40.3	46	35.3	500	40.8
Partially Insulated Yes, partial	98	42.0	204	45.9	161	38.2	50	38.4	512	41.7
No	20	8.4	53	11.9	69	16.5	27	20.5	168	13.7
Don't know	5	2.0	14	3.0	21	5.0	8	5.8	47	3.8

Chi Square significant at the .0026 level.
Number of responses: 1227

TABLE 139

HOMES WITH INSULATION BY RACE

	White		Nonwhite		Total State	
Insulated Home	**No.**	**%**	**No.**	**%**	**No.**	**%**
Completely Insulated	460	43.0	41	25.2	500	40.7
Partially Insulated	460	43.0	53	32.7	512	41.7
Not Insulated	111	10.4	59	36.4	169	13.8
Don't Know	38	3.5	9	5.6	47	3.8

Chi Square significant at the .0001 level.
Number of responses: 1228

TABLE 140

HOMES WITH INSULATION BY INCOME

Insulated	$0- 3,999	$4,000 -6,999	$7,000 -9,999	$10,000 14,999	$15,000 -19,999	$20,000 -29,999	$30,000+	TOTAL STATE
Completely Insulated	15.8	27.9	30.4	43.3	45.5	56.4	62.7	39.2
Partially Insulated	40.1	44.1	47.0	42.5	47.0	40.7	31.9	42.5
Not Insulated	36.4	23.6	15.9	9.8	6.6	2.9	4.5	14.5
Don't Know	7.7	4.4	6.7	4.4	.9	--	3.8	

Chi Square significant at the .0001 level.
Number of responses: 942

TABLE 141

HOMES WITH INSULATION BY OWN/RENT

	Own		Rent		Other		Total State	
Insulated	No.	%	No.	%	No.	%	No.	%
Completely Insulated	492	41.9	32	33.0	8	31.8	532	41.1
Partially Insulated	505	43.1	26	26.7	14	53.6	545	42.0
Not Insulated	146	12.5	22	22.4	4	14.7	172	13.3
Don't Know	30	2.5	17	17.9	--	--	47	3.6

Chi Square signficant at the .0001 level.
Number of responses: 1296

TABLE 142

HOMES WITH INSULATION BY NUMBER IN HOUSEHOLD

	Live Alone		Two Person Household		Three+ Household		Total State	
Insulated Home	No.	%	No.	%	No.	%	No.	%
Completely Insulated	174	33.8	299	46.6	47	42.2	520	41
Partially Insulated	221	42.9	267	41.6	44	39.8	532	41.9
Not Insulated	98	19.0	57	8.9	17	15.0	172	13.6
Don't Know	22	4.3	19	2.9	3	3.0	44	3.5

Chi Square significant at the .0001 level.

Number of responses: 1269.

Table 143

HOMES WITH STORM WINDOWS BY AGE

	<60		60-69		70-79		80+		Total State	
Storm Windows	No.	%	No.	%	No.	%	No.	%	No.	%
Yes	105	44.8	221	49.8	179	42.7	57	43.7	563	45.8
No	130	55.2	223	50.2	240	57.3	74	56.3	667	54.2

Chi Square not significant .1821.
Number of responses: 1229

TABLE 144

HOMES WITH STORM WINDOWS BY RACE

	White		Nonwhite		Total State	
Storm Windows	No.	%	No.	%	No.	%
Yes	516	48.2	47	29.0	563	45.7
No	554	51.8	114	71.0	668	54.3

Chi Square significant at the .0001 level.
Number of responses: 1230

TABLE 145

HOMES WITH STORM WINDOWS BY INCOME

Storm Windows	$0- 3,999	$4,000 -6,999	$7,000 -9,999	$10,000 14,999	$15,000 -19,999	$20,000 -29,999	$30,000+	TOTAL STATE
Yes	32.9	41.5	37.1	45.9	51.3	49.9	58.4	44.8
No	67.1	58.5	62.9	54.1	48.7	50.1	41.6	55.2

Chi Square significant at the .0037 level.
Number of responses: 941

TABLE 146

HOMES WITH STORM WINDOWS BY OWN\RENT

	Own		Rent		Other		Total State	
Storm Windows	No.	%	No.	%	No.	%	No.	%
Yes	555	47.4	34	33.8	5	17.3	594	43.7
No	616	52.6	66	66.2	22	82.7	704	54.3

Chi Square significant at the .0004 level.
Number of responses: 1298

TABLE 147

HOMES WITH STORM WINDOWS BY NUMBERS IN HOUSEHOLD

	Live Alone		Two Person Household		Three+ Household		Total State	
Storm Windows	No.	%	No.	%	No.	%	No.	%
Yes	218	42.5	319	49.7	45	39.7	582	45.9
No	295	57.5	323	50.3	69	60.3	687	54.1

Chi Square significant at the .0191 level.

Number of responses: 1269.

Table 148

HOMES WITH TERMITE CONTRACTS BY AGE

	<60		60-69		70-79		80+		Total State	
Termite contract	No.	%	No.	%	No.	%	No.	%	No.	%
Yes	83	36.2	179	41.6	165	40.9	40	32.0	467	39.
No	138	59.9	231	53.5	203	50.5	74	59.2	646	54.
Don't know	1	.4	5	1.2	10	2.5	2	1.5	18	1.
Live in apartment or rented home	8	3.5	16	3.7	24	6.0	9	7.2	58	4.

Chi Square not significant .0804.
Number of responses: 1189

TABLE 149

CONTRACTS FOR TERMITE CONTROL BY RACE

	White		Nonwhite		Total State	
Contract	No.	%	No.	%	No.	%
Yes	447	42.9	21	14.1	468	39.3
No	536	51.4	111	74.4	647	54.3
Don't Know	12	1.2	6	4.0	18	1.5
Live in Apartment or Rented Home	47	4.5	11	7.1	57	4.8

Chi Square significant at the .0000 level.

TABLE 150

HOMES WITH TERMITE CONTRACTS BY INCOME

Contract for Termite Control	$0-3,999	$4,000-6,999	$7,000-9,999	$10,000-14,999	$15,000-19,999	$20,000-29,999	$30,000+	TOTAL STATE
Yes	7.6	26.7	30.3	43.0	43.6	51.4	62.6	37.7
No	79.3	62.3	63.4	50.5	54.5	45.6	36.5	55.8
Don't Know	5.5	2.3	1.8	2.3	--	1.0	--	1.8
Live in Apartment or Rented Home	7.6	8.8	4.5	4.2	1.9	2.0	0.9	4.8

Chi Square significant at the .0001 level.
Number of responses: 908

TABLE 151

HOMES WITH TERMITE CONTRACTS

	Own		Rent		Other		Total State	
Contract	No.	%	No.	%	No.	%	No.	%
Yes	483	41.5	5	6.5	7	26.1	494	39.2
No	664	57.1	7	9.2	14	55.3	684	54.4
Don't Know	15	1.3	--	--	3	11.2	18	1.4
Live in an Apartment/or Rented House	--	--	61	84.3	2	7.4	62	5.0

Chi Square significant at the .0000 level.

Table 152

HOMES WITH TERMITE CONTRACTS BY NUMBER IN HOUSEHOLD

	Live Alone		Two Person Household		Three + Person Household		Total State	
	No.	%	No.	%	No.	%	No.	%
Yes	189	38.2	266	42.5	33	30.2	488	39.6
No	256	51.7	343	54.7	66	60.4	665	54.0
Don't Know	7	1.4	3	.4	6	5.8	16	1.3
Live in Apt or Rented Home	43	8.7	15	2.4	4	3.6	62	5.1

Chi Square significant at the .0001 level.
Number of responses: 1232

Table 153

HOMES WITH ENERGY SAVING DEVICES BY AGE

	<60		60-69		70-79		80+		Total State	
Other devices	**No.**	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**
Yes	35	15.8	88	21.1	57	14.9	19	16.1	200	17.5
No	188	84.2	329	78.9	327	85.1	101	83.9	946	82.5

Chi Square not significant .1012.
Number of responses: 1146

TABLE 154

HOMES WITH ENERGY SAVING DEVICES BY RACE

	White		Nonwhite		Total State	
Energy Saving Devices	No.	%	No.	%	No.	%
Yes	188	18.8	12	8.2	200	17.4
No	813	81.2	134	91.8	947	82.6

Chi Square significant at the .0026 level.

TABLE 155

HOMES WITH ENERGY SAVING DEVICES BY INCOME

Energy Saving Devices	$0- 3,999	$4,000 -6,999	$7,000 -9,999	$10,000 14,999	$15,000 -19,999	$20,000 -29,999	$30,000+	TOTAL STATE
Yes	10.2	7.3	14.8	16.0	17.5	23.0	40.2	16.8
No	89.8	92.7	85.2	84.0	82.5	77.0	59.8	83.2

Chi Square significant at the .0001 level.
Number of responses: 876

TABLE 156

HOMES WITH ENERGY SAVING DEVICES BY OWN\RENT

Energy Saving Devices	Own		Rent		Other		Total State	
	No.	%	No.	%	No.	%	No.	%
Yes	199	18.1	16	17.7	4	16.9	219	18.1
No	899	81.9	73	82.3	21	83.1	993	81.9

Chi Square signficant at the .00562 level.

TABLE 157

HOMES WITH ENERGY SAVING DEVICES BY NUMBER IN HOUSEHOLD

	Live Alone		Two Person Household		Three+ Household		Total State	
Energy Saving Devices	No.	%	No.	%	No.	%	No.	%
Yes	64	13.4	127	21.0	21	20.5	212	17.9
No	414	86.6	476	79.0	82	79.5	972	82.1

Chi square significant at the .0039 level.

Table 158

HOME SAFETY DEVICES BY AGE

	<60		60-69		70-79		80+		Total State	
Safety Devices	No.	%	No.	%	No.	%	No.	%	No.	%
Smoke alarm*	141	58.2	301	65.3	232	53.6	70	50.9	774	58.4
Grab Bars in Tub**	18	7.4	53	11.6	97	22.5	42	30.9	211	16.6
Dead Bolt Locks	71	29.2	171	37.1	147	34.0	50	36.5	439	34.5
Peep Hole in Front Door	69	28.5	140	30.3	116	26.9	33	23.9	358	28.1
Burglar Alarm***	3	1.2	14	3.0	20	4.7	7	5.2	44	3.5
Stair Rails	25	10.5	68	14.8	59	13.7	24	17.1	176	13.9
Security Lights	66	27.4	138	29.9	126	29.2	34	24.9	365	28.6

* Chi Square significant at the .001 level.
** Chi Square significant at the .0001 level.
*** Chi Square significant at the .05 level.
Number of responses: 1273

TABLE 159

HOME SAFETY DEVICES BY RACE

	White		Nonwhite		Total State	
Safety Devices	No.	%	No.	%	No.	%
Smoke Alarm***	694	62.6	51	30.6	745	58.5
Grab Bars in Tub*	195	17.6	17	9.9	211	16.6
Dead Bolt Locks*	395	35.7	45	27.0	440	34.5
Peep Hole in Front Door	308	27.8	50	29.7	358	28.1
Burglar Alarm	34	3.1	11	6.3	44	3.5
Stair Rails**	164	14.9	12	7.2	176	13.9
Security Lights	327	29.5	38	22.5	365	28.6

TABLE 160

HOME SAFETY DEVICES BY INCOME

Safety Devices	$0- 3,999	$4,000 -6,999	$7,000 -9,999	$10,000 14,999	$15,000 -19,999	$20,000 -29,999	$30,000+	TOTAL STATE
Smoke Alarm**	39.6	45.6	44.6	61.8	62.1	72.9	78.7	56.6
Grab Bars in Tub	14.7	17.9	14.9	14.0	15.3	14.0	17.0	84.4
Dead Bolt Locks**	31.9	23.4	25.3	35.8	26.3	45.0	56.6	33.2
Peep Hole in Front Door*	19.8	26.1	23.1	28.0	30.5	25.7	40.8	27.6
Burglar Alarm	2.4	2.1	1.9	4.0	4.2	1.9	8.2	3.4
Stair Rails**	4.8	4.5	8.8	13.7	20.2	15.9	34.5	13.3
Security Lights**	15.5	19.6	21.8	29.0	37.3	41.2	36.2	27.5

*Chi Square significant at the .05 level.
**Chi Square significant at the .0001 level.
Number of responses: 976

TABLE 161

HOME SAFETY DEVICES BY OWN\RENT

	Own		Rent		Other		Total State	
Safety Devices	No.	%	No.	%	No.	%	No.	%
Smoke Alarm	718	59.3	57	54.8	16	57.7	790	58.9
Grab Bars in Tub**	181	14.9	33	31.6	9	33.3	223	16.6
Dead Bolt Locks	428	35.4	36	34.4	4	13.9	467	34.8
Peep Hole in Front Door*	333	27.5	39	38.1	10	36.9	382	28.5
Stair Rails	169	13.9	19	18.2	3	10.4	191	14.2
Security Lights	341	28.1	38	36.7	6	22.9	385	28.7
Burglar Alarm	44	3.6	3	2.7	2	6.9	48	3.6

*Chi Square significant at the .05 level.
**Chi Square significant at the .0001 level.
Number of responses: 1341.

TABLE 162

HOME SAFETY DEVICES BY HOUSEHOLD

	Live Alone		Two Person Household		Three+ Household		Total State	
Safety Devices	No.	%	No.	%	No.	%	No.	%
Smoke Alarm***	280	52.5	430	65.3	62	53.1	772	59.0
Grab Bars in Tub	103	19.4	100	15.1	14	11.9	217	16.6
Dead Bolt Locks	186	34.9	236	35.8	31	27.0	453	34.7
Peep Hole in Front Door	148	27.8	193	29.3	32	27.8	373	28.5
Burglar Alarm	18	3.3	21	3.3	6	5.0	45	3.4
Stair Rails	62	11.6	103	15.7	18	15.3	183	14.0
Security Lights	153	28.7	192	29.2	27	23.5	373	28.5

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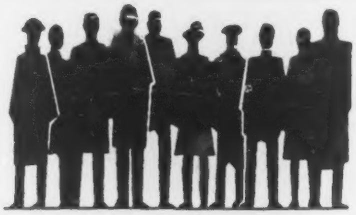
AGING ARKANSAS



Profiles from Wave II

AGING ARKANSAS

THE ARKANSAS LONGITUDINAL STUDY ON HEALTH AND AGING

WAVE II

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May, 1989

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AGING ARKANSAS: THE ARKANSAS LONGITUDINAL STUDY ON HEALTH AND AGING

FINDINGS FROM WAVE II

1.0 INTRODUCTION

The planning and delivery of services to an increasingly elderly population remains one of the major challenges facing Arkansas decision makers. The Arkansas Longitudinal Study on Health and Aging (ALSHA) was undertaken in 1986 by the Arkansas Area Agencies on Aging in cooperation with the Arkansas Division of Aging and Adult Services to produce a data base which could provide a basis for efficient and effective service delivery decisions. With the development of a five year plan of data collection activities, Arkansas cooperated originally with the Southwest Long Term Care Gerontology Center and currently with the Heartland Center on Aging, Disability and Long Term Care, an Administration on Aging funded national long term care resource center for state units on aging, to produce one of the most sophisticated, state-level data bases available to state planners within the aging network. This report is the fourth in a series of analyses provided to the Arkansas aging network to assist them in their planning and allocation decisions. Previous reports detailed all the findings from the first year of data collection and profiled differences among the eight area agency planning areas in the state. The second report focused on a detailed study of primary caregivers for elders in Arkansas. The third represented an analysis of the housing characteristics and needs of a random sample of half the ALSHA sample.

This report represents an analysis of service utilization and levels of unmet need for a variety of types of services of interest to the aging network. The questionnaire used to develop this study was administered to a random sample of approximately half of the original ALSHA sample. Two types of findings resulted from this research endeavor. First, the continued interest of the Arkansas Association of Area Agency on Aging in differences among the regions is recognized and addressed with a series of technical tables in Section 5.0 of this report detailing all the findings from the questionnaire. However, a longitudinal study of this nature actually provides a unique opportunity to focus on issues of special interest which might have been identified in a previous wave of data collection. The second focus of this study and the one which will receive the most attention in the textual representation of data is mandated by concerns of decision makers at all levels of government concerning the targeting of resources to elders most in need. Attention has been devoted to the identification of patterns of utilization of formal and informal services in the state of Arkansas and to identifying levels of unmet need for various services. The identification of unmet needs is not only a concern of local planners but is also mandated by the most recent amendments to the Older Americans' Act.

The report from Wave II data collection is divided into five sections. Following this introduction, the second section details the sample characteristics of the participants in this split half sample from the original ALSHA. The third section outlines the independent and dependent measures of concern to this second phase of data analysis. The fourth section profiles the findings from selected questions in the study. The fifth section includes a detailed technical appendix of tables reporting results from all the questions asked in the second phase.

2.0 SAMPLE CHARACTERISTICS OF WAVE II

One of the most significant challenges facing any longitudinal study is maintenance of a representative sample across time. Added challenges are faced when samples are selected from the larger data base. Although the most prestigious national samples also follow a sample selection process in their longitudinal followups (i.e. the National Health Interview Survey's Longitudinal Supplement on Aging), the question which must arise in second and later phases is whether any changes observed are the results of real change or the result of a biased sample. To address these concerns, the split-half sample selected for Wave II in the ALSHA was compared to the characteristics of the larger sample from Wave I of the study. The expectation would be that due to the aging process, changes would be observed in the makeup of the age cohorts with the youngest cohorts decreasing in size and the older cohorts increasing in their proportion. Second, the expectation would be that the greatest loss from Wave I to Wave II would be among individuals living alone who might have remarried, retired and moved, or moved into an institutional setting or into an extended family setting.

In comparing the sample characteristics for Wave II to Wave I, the second sample is closely aligned with the characteristics identified in the first wave. The expected changes in the composition of the youngest cohorts is confirmed as is the increase in the proportion of older respondents. Also confirmed is the decrease in proportion of individuals living alone and an increase in the proportion of elders living in extended family situations. The distribution among regions, and by income, race, and gender characteristics vary only slightly from the first sample and are well within the sampling margin of error. Because the distribution of the sample appears to accurately represent the full sample, and because the analyses focus on what is happening to older adults in the second year of a study, throughout the majority of this report, no statistical weights are applied to the data.

Field work was conducted in two waves, each one representing a free standing subsample of the original study. The two waves ompleted resulted in the completion of more than 2,400 usable, verifiable responses. Analyses of administrative data indicate that for 92.4% of the sample, their location and ability and willingness to participate in the study remain unchanged. Slightly more than 3% of the sample could be confirmed as mortalities, and .7% were in nursing homes. Less than 1.5% refused to continue in the later phase of the study. The remaining households could not be reached at the original number or through their alternative contact.

3.0 DEVELOPMENT OF INDEPENDENT AND DEPENDENT VARIABLES

The variables developed for this study are individual measures which can be grouped and regrouped into scales and composite measures. Many of the probes remained the same as those in the year one questionnaire to permit comparisons across time. In some cases, queries were added to strengthen the validity of a measure and to provide the ability for more indepth understanding of an issue.

3.1 Independent Variables: Location One important variable related to the development of service delivery policies is that of location and its impact on perceptions of limitations, access, and utilization. In Wave I, the location variable utilized was that of Area Agency region. That same analysis was also performed for the Wave II report. However, in most instances, the findings for this analysis are contained in the technical appendices. Differences among regions continue to be of interest to planners. However, in this data set, the sample size is smaller resulting in larger sampling errors within each region. Although valid comparisons can be made across regions, any further breakout of results by categories within the regions would result in unacceptably large sampling errors. Differences among regions are discussed in the findings when relevant and significant.

Demographic Characteristics: Demographic categories of age, sex, income, marital status and household composition have all been demonstrated repeatedly in volumes of literature as having impact on health status and service utilization. Wave II continues to utilize those same categories as independent variables. With the exception of the gender variable, these demographic categories may change over time and are of particular interest in a longitudinal study. The demographic categories of race and educational level were not asked in the second round of questioning since they represent variables which remain stable from wave to wave. The racial data from Wave I have been tied to the Wave II responses as the last stage of analysis. Although minority respondents are present in both waves in their expected proportions, they comprise a relatively small percentage of the overall sample. **Racial data are presented in this report with the cautionary note that smaller numbers result in somewhat higher sampling errors in Wave II than was true for Wave I.** In technical tables developed from the joined file, the total number of respondents is 2255. This loss of cases results from cases where imperfect matches existed. Although the gender variable also remains unchanged from wave to wave, it is included each year as a point for a logical error check when year to year data sets are combined for analysis.

Actual age is recorded for each individual in each sample household as an interval level measure for utilization in regression analyses. Age cohorts selected for this report were combined into categories of age as follows: 55 to 59, 60 to 64, 65 to 69, 70 to 74, 75 to 79, 80 to 84, and 85 or older. This breakout enables planners to identify needs for the preretirement population who qualify under the Older Americans Act for services.

Household income plays a vital role in access and utilization decisions and has been demonstrated in the literature to be linked with prevalence levels for many problems. This linkage was confirmed among Arkansas residents in Wave I. Income is frequently viewed as a dummy variable for access to quality health care. It is also one of the core concepts of "enabling" behavior concerning service utilization. Senior project staff's experience over the past ten years with large scale surveys has been that attempting to obtain accurate income information at the exact dollar level results in high rates of missing data. Income data for wave II were obtained in small incremental categories which matched those used for Wave I.

Insurance Coverage: Access to health insurance has been reported as an important variable in understanding utilization and access issues in disability and rehabilitation research. Not surprisingly, insurance issues and concerns with how various packages would affect future utilization rates have often been the stumbling block to the development of appropriate insurance products in the private sector and equitable or efficient reimbursement programs within the public sector. Insurance coverage data are presented for each individual in the sample. Several probes which identify nonHMO group employer and individual plans, HMO plans both employer and private, Medicare, Medicaid, supplemental or Medigap insurance, VA or CHAMPUS, and other types are included. A composite variable identifying individuals with no insurance, those with publicly provided policies through entitlements or income qualifications, those with a mix of public and private and those with private sources only is presented in this report. This particular variable was not part of the Wave I analysis and represents new information for planners.

3.2 **Dependent Variables:** An understanding of the utilization of health, social, and long term care services is somewhat easier to identify than is the concept of unmet needs for these services. Much debate exists in the research community concerning how unmet need can be measured. Reliance on actual service use can misrepresent the level of need in a community where problems in accessibility or lack of availability can influence calculations of need (Kane and Kane, 1986). Limitations in functional abilities are generally accepted as the most appropriate measure of need for services. Some researchers would argue that need is correctly identified only through the use of "objective," independent assessment and that self-reports reflect demand, not need. Throughout the development of this project, senior staff have supported the relevance of the self-report as one of the most reliable predictors of utilization of services and that philosophy continues in the Wave II analysis. Reflecting that research approach, the dependent variables in this study are organized into categories reflecting ADL, IADL and various social and economic dependencies.

Social Activities: The following single measures are analyzed and then grouped into a scale of social activity with a maximum value of 5. Participation in senior center activities or social or civic groups; religious activities, continuing education, travel, and visiting or socializing with friends are included in this scale. Although other activities are identified on the questionnaire, these probes represent activities which involve interaction with other people, rather than the solitary activities of reading or watching TV.

Economic Vulnerability or Impairment: Following the definitions developed for Wave I of this study, a modified version of an economic vulnerability scale is presented in this study. In phase II of the project, some of the more detailed questions concerning difficulty paying rent, groceries, etc. were dropped from the questionnaire and a general probe about having enough money was left in the study. The scale developed in this report identifies individuals who make less than $7,000 for one person, $10,000 for two or three and $15,000 for a household of four or more; individuals with no insurance, individuals who are unemployed for health or caregiving reasons; those who sometimes or frequently do not have enough money to get by each month, and individuals who believe they are worse off financially than they were during the last survey. Responses to these probes are totaled to develop a scale of economic vulnerability and presentation of average number of problems is presented by relevant independent variables.

Mental Health: Probes identifying difficulties with depression or stress, other emotional problems or the presence of Alzheimer's or Parkinson's Disease constitute a four point mental health scale impairment scale. A measure identifying those most affected by these difficulties is comprised of a scale identifying individuals who receive assistance for these problems more than weekly or who are frequently or constantly restricted by the difficulties. For respondents in the survey, an expanded mental health impairment scale not available in Wave I was constructed from questions identifying difficulty falling or staying asleep; problems with eating; frequent crying; feeling lonely; and an evaluation of life satisfaction on a five point Likert scale. These variables represent measures used in other studies to identify depressive symptoms. They are available only for respondents in the survey and not for other household members for whom subjective information is not available.

Physical Health Impairments: The single variables which compose this scale consist of difficulties with a variety of chronic health problems including difficulty breathing, hearing, problems with teeth, dentures or gum disease, eye disease, kidney problems; heart problems hardening of the arteries, hypertension, cancer, arthritis, diabetes, and/or stroke. An additional scale is developed to identify those individuals who are frequently or constantly restricted by these problems.

Cognition: Probes concerning difficulties managing business affairs or balancing a check book, remembering long ago or recent events, understanding instruction and the presence of Alzheimer's disease comprise a scale for difficulties in cognition. An implied severity scale consists of probes determining individuals who need assistance for these problems on more than a weekly basis or who are frequently or constantly restricted by the health problem.

Limitations in Activities of Daily Living (ADL): Probes include difficulties feeding self; dressing or grooming; bathing or shampooing; toileting; bowel or bladder control; and walking without assistance from another person. A maximum score of six would indicate an individual with an impairment in all six areas. A severity scale identifies individuals who need assistance for any of these difficulties on more than a weekly basis.

Limitations in Instrumental Activities of Daily Living (IADLs): Probes include difficulties doing light housework; cooking, heavy cleaning or yard work; conducting business affairs or balancing a check book; taking medication; using the phone; doing laundry; shopping; and need for assistance to get places outside of walking distance. A severity measure includes probes concerning assistance for any of these variables more frequently than once/week.

Formal and Informal Service Utilization Variables: Based on the findings from the first phase of work in Arkansas, the service variables will be organized into the following paradigm:

In-home health/ personal care	In-home chore	Out of Home/Community		
		Educational	Medical	Social
Formal, paid	Formal, paid	Use Now	Use Now	Use Now
Informal	Informal	Need 1+	Need 1+	Need 1+
Need 1+	Need 1+			

The need for or use of **In-Home Health or Personal Care (HPC)** is indicated first by an impairment in one of the following areas: difficulty feeding self; dressing or grooming; bathing or shampooing; taking medication; toileting; bowel or bladder accidents; walking or getting around; and need for or use of social workers or case managers, in-home nursing, or in-home therapy. Use of a formal or an informal service provider is determined by a series of followup probes once an impairment has been identified asking who if anyone helps. Possible responses are no one, friends or family (unpaid), formal help (paid) or a combination of formal or informal sources.

The need for or use of **In-Home Chore Services (CHS)** is determined by an impairment in doing normal housework; cooking; heavy cleaning or yard work; managing business affairs; shopping; using phone; doing laundry; and assistance with home delivered meals. Use of formal or informal service is determined by the same followup probes described above determining who if anyone provides help.

The use of or perceived need for **Community Based Services delivered outside the home** include probes about senior centers, senior meals programs, legal assistance, counseling, employment training, education concerning health issues, continuing education, adult day care, respite care, and caregiver support groups.

Unmet Need: Identifying levels of unmet need in this project will rely upon the above categories to identify individuals with problems where no one helps. In addition to that very gross measure of unmet need, additional information is obtained. Among elderly respondents, the GAO (1986) has utilized the 1982 National Long Term Care Survey to determine that 5% of the elders receiving formal or informal help for ADL problems have unmet needs as do 36% of those receiving help for IADLs. An analysis of these variables was performed in Wave I, and subsequently a new series of questions was added for Wave II which enabled the identification of perception of need for more services if the elder was already receiving help.

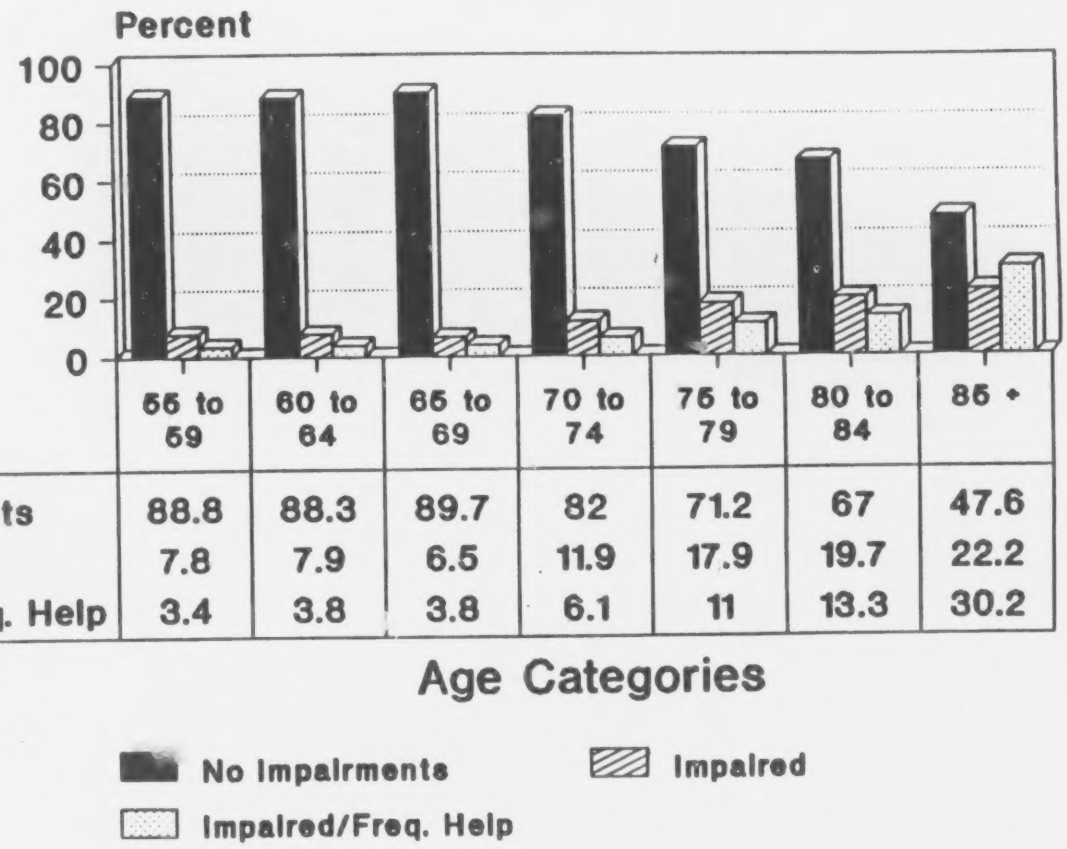
These scales and composite measures utilize the single variables which were the central focus of the Wave I report. In the Wave II study, more attention is devoted to the more complex type of analysis which combines these measures into grouped categories. The following section outlines many of the findings by significant demographic categories.

4.0. OVERVIEW OF FINDINGS FROM WAVE II

4.1 ADL Impairments

As indicated in many national studies and in the findings from Wave I in Arkansas, the presence of an impairment in an activity of daily living is frequently a very reliable predictor of involvement in the service sector. A summary of the presence or absence of ADL impairments by age category is presented in Figure 4-1. As is graphically illustrated in this figure, the large majority of elders report no ADL impairments. However, the presence or absence of impairments does change significantly with increasing age. In the youngest age cohort, 88.8% report no ADL problems at all, but among the oldest age cohort 47.6% report no problems. Of the oldest cohort, slightly more than 20% have problems but do not receive help more often than weekly. Almost one-third, 30.2%, do receive assistance for at least one problem more frequently than once per week. At the other end of the age continuum, it is important to note than the youngest cohorts, individuals age

Presence or Absence of ADL Impairments and Use of Frequent Assistance by Age



	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 +
No Impairments	88.8	88.3	89.7	82	71.2	67	47.6
Impaired	7.8	7.9	6.5	11.9	17.9	19.7	22.2
Impaired/Freq. Help	3.4	3.8	3.8	6.1	11	13.3	30.2

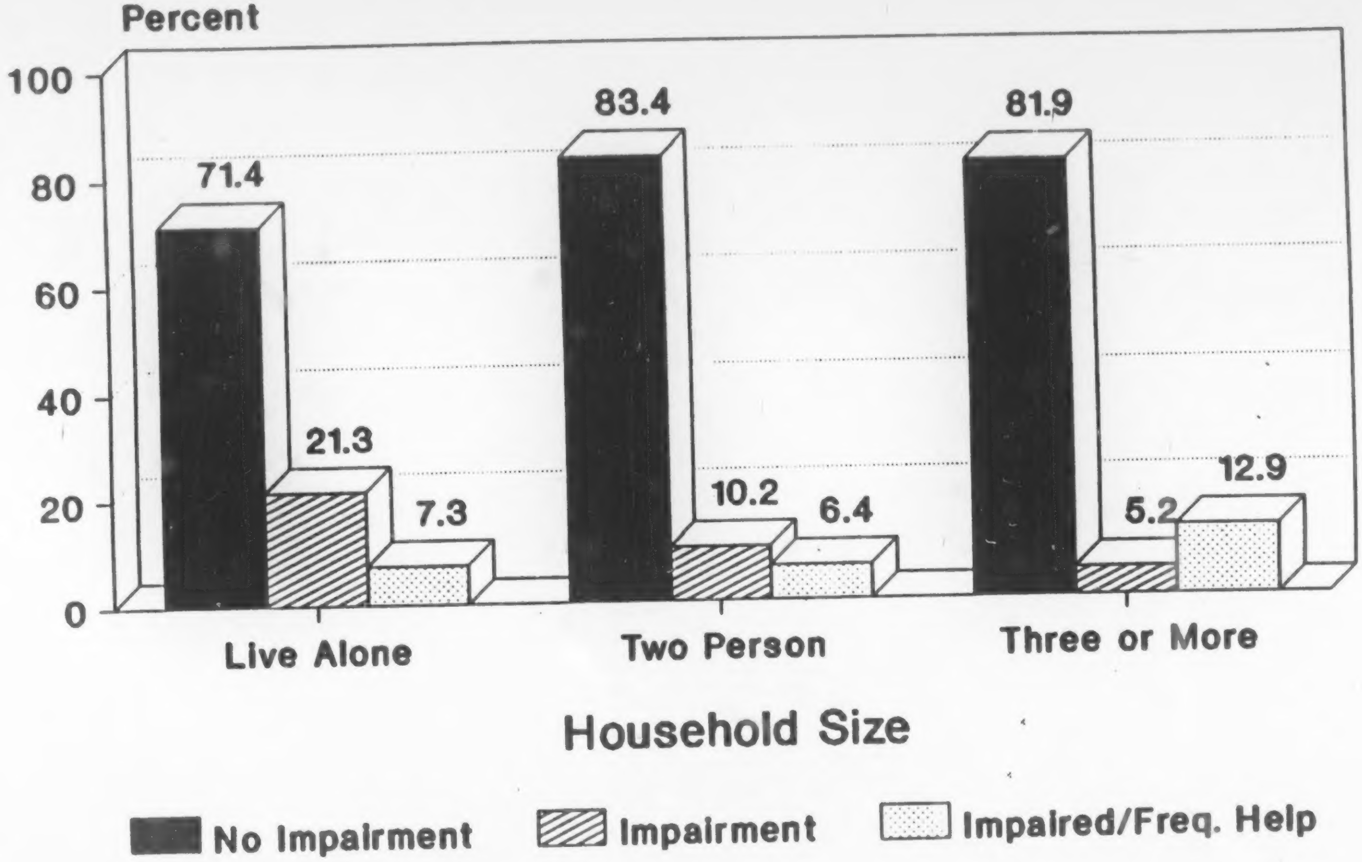
•Statistically Significant Differences

55 to 64 do report low levels of impairments, but almost four percent of both cohorts receive assistance for an ADL more than weekly. As more developmentally disabled adults age into retirement years, this figure may begin to rise. Individuals among the youngest cohort are generally not eligible for Older Americans Act services.

Statistically significant differences are also noted for household size, income and receipt of Medicaid. Individuals living alone are most likely to have at least one ADL impairment, but almost three-quarter, 71.6%, have no ADL impairments. In households with three or more, almost 13% have impairments AND receive assistance more often than once per week (Figure 4-2).

The pattern of ADL impairment among income groups is presented in Figure 4-3. The two lowest income groups report substantially more impairment, and they also report larger number of impairments for which help is provided more than once weekly. White respondents are more likely to report no difficulties, 81.7%, than are nonwhite respondents, 72.2%. Non-whites report a larger percentage of difficulties, 18.7%, but do not differ greatly in the number of ADLs requiring frequent assistance (Figure 4-4). Medicaid recipients are also substantially more impaired than non-Medicaid recipients and receive help more frequently (Figure 4-5). More than 3% of the sample who have no insurance coverage receive frequent assistance with one or more difficulties. Fifteen percent of those insured

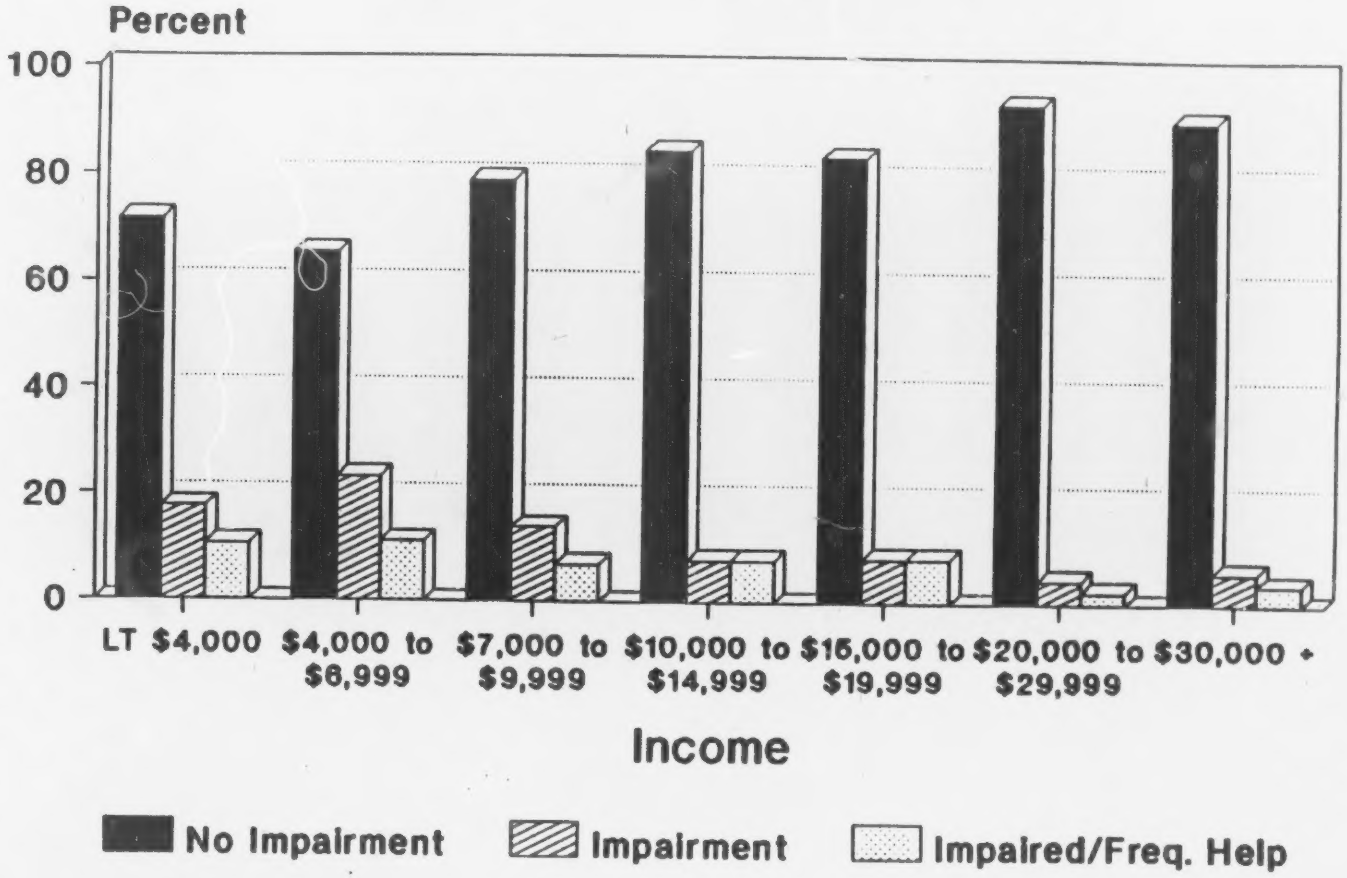
Presence or Absence of ADL Limitations and Frequent Assistance by Family Size*



*Statistically Significant Differences

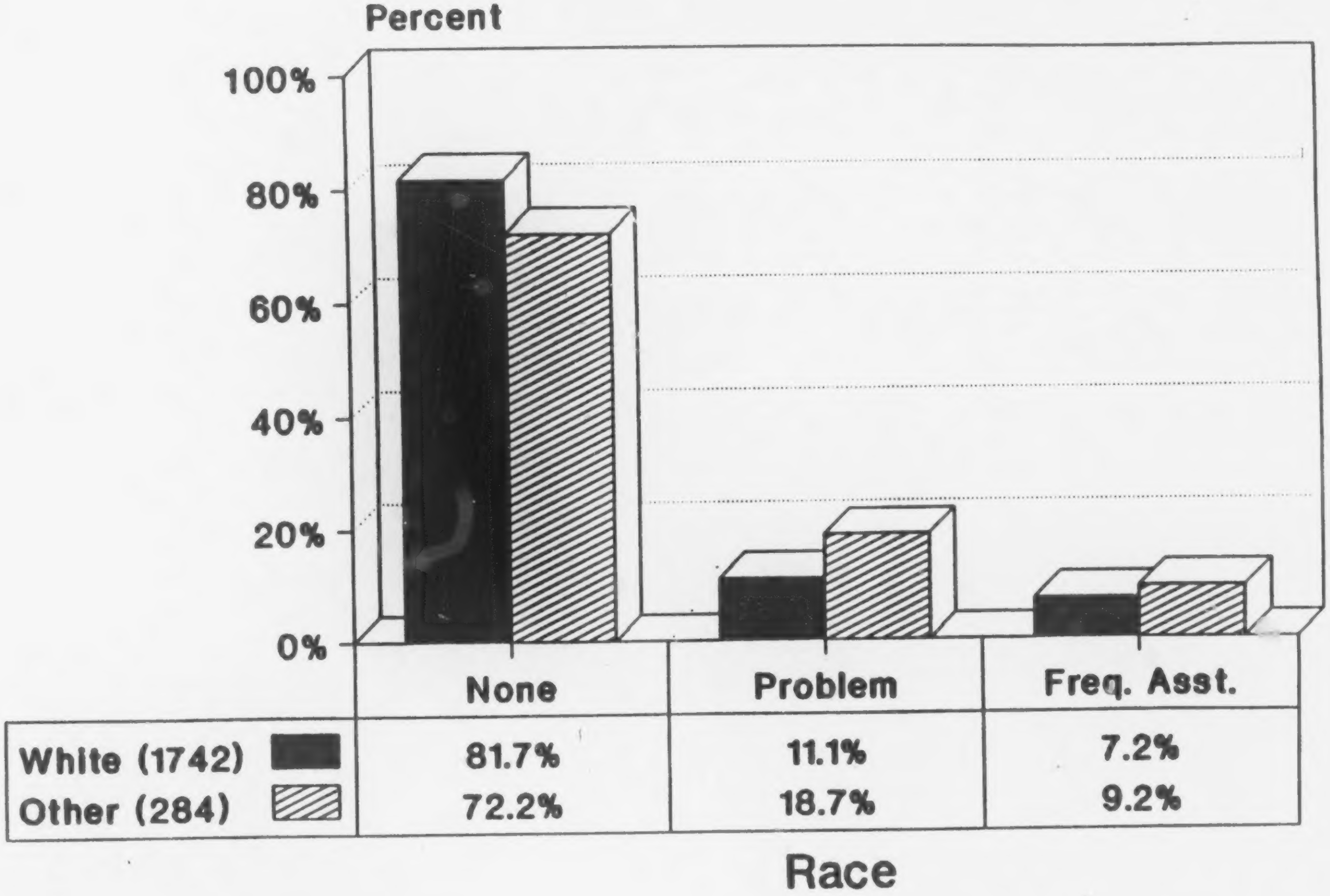
Figure 4 - 3

Presence or Absence of ADL Limitations and Frequent Assistance by Income*



Statistically Significant Differences

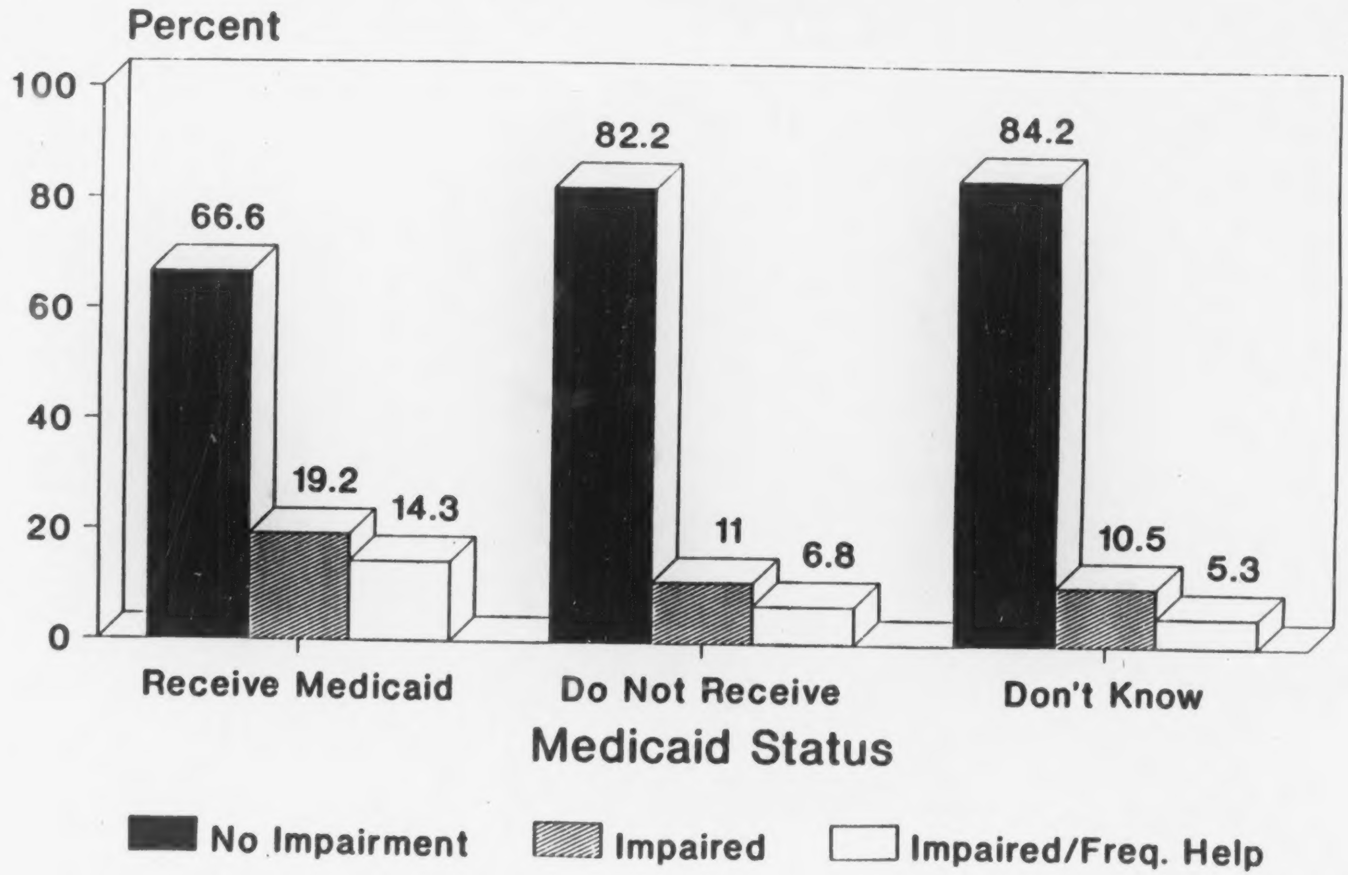
ADL Impairment and Need for Frequent Assistance by Race



Statistically Significant at .0004

Figure 4 - 5

Presence or Absence of ADL Impairment and Frequent Assistance by Medicaid*



*Statistically Significant Differences

only through public programs such as Medicare, Medicaid, Veterans or CHAMPUS policies are receiving frequent assistance (Figure 4-6). No statistically significant differences are found among regions.

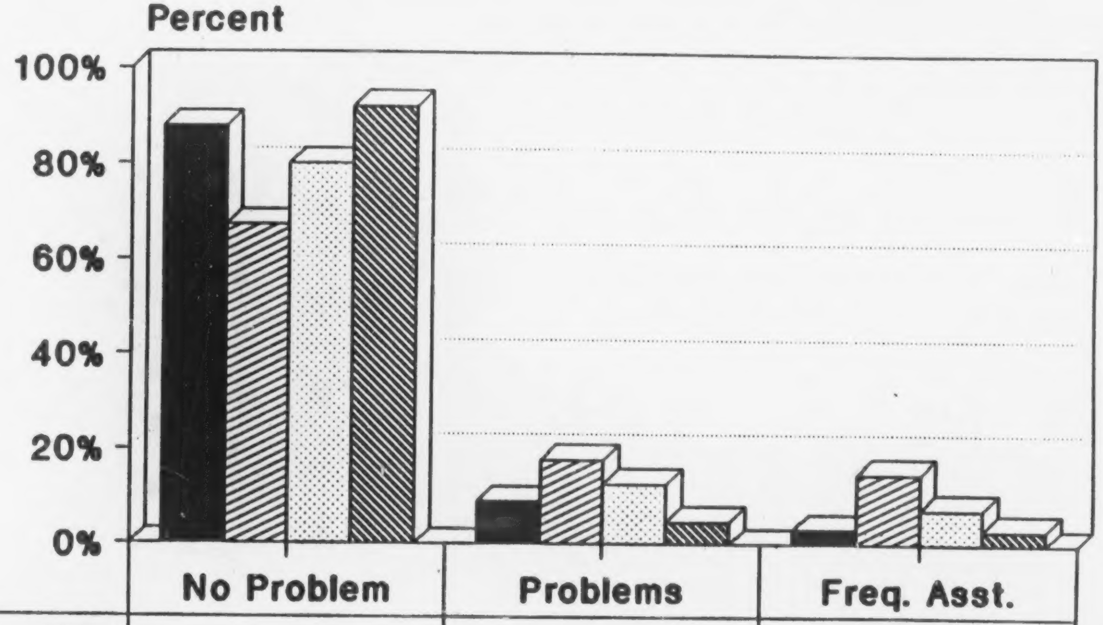
4.2 IADL Impairments

Presence or absence of difficulties in instrumental activities of daily living may often lead to need or demand for chore or "low tech" services. Figure 4-7 presents the impairment levels and receipt of assistance on more than a weekly basis by age grouping. Almost four-fifths of the 85 or older cohort have at least one IADL impairments and almost half receive assistance for one or more impairment more often than weekly. Twenty-two percent of the youngest cohort report difficulty doing at least one of the IADL activities, but less than 7% receive frequent assistance.

Individuals living alone appear to be the most impaired in IADLs with 39% reporting no problems, 41% describing at least one limitation, and 19.9% receiving frequent assistance for at least one problem. Elders in households of three or more are more likely than others to receive help more than weekly (Figure 4-8). Upper income elders are significantly less likely to be impaired than are lower income cohorts, and receipt of frequent assistance is more than six times more likely among the two lowest income groups than among the highest (Figure 4-9). Almost half the non-white elders, 48.9%, have no IADLs, but more than three-fifths of the white elders are free of IADL

Figure 4 - 6

Presence of ADLs and Need for Frequent Assistance by Insurance

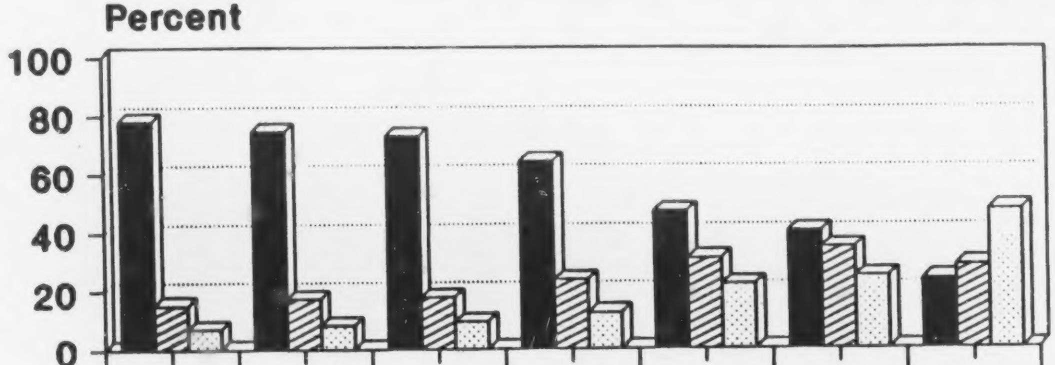


	No Problem	Problems	Freq. Asst.
None (188) ■	87.8%	9%	3.2%
Public (481) ▨	67.2%	17.9%	15%
Mix (1128) ░	80%	12.7%	7.4%
Private (458) ▧	92.1%	4.8%	3.1%

Insurance

Statistically Significant at .0001

Presence or Absence of IADL Limitations and Frequent Assistance by Age Group*



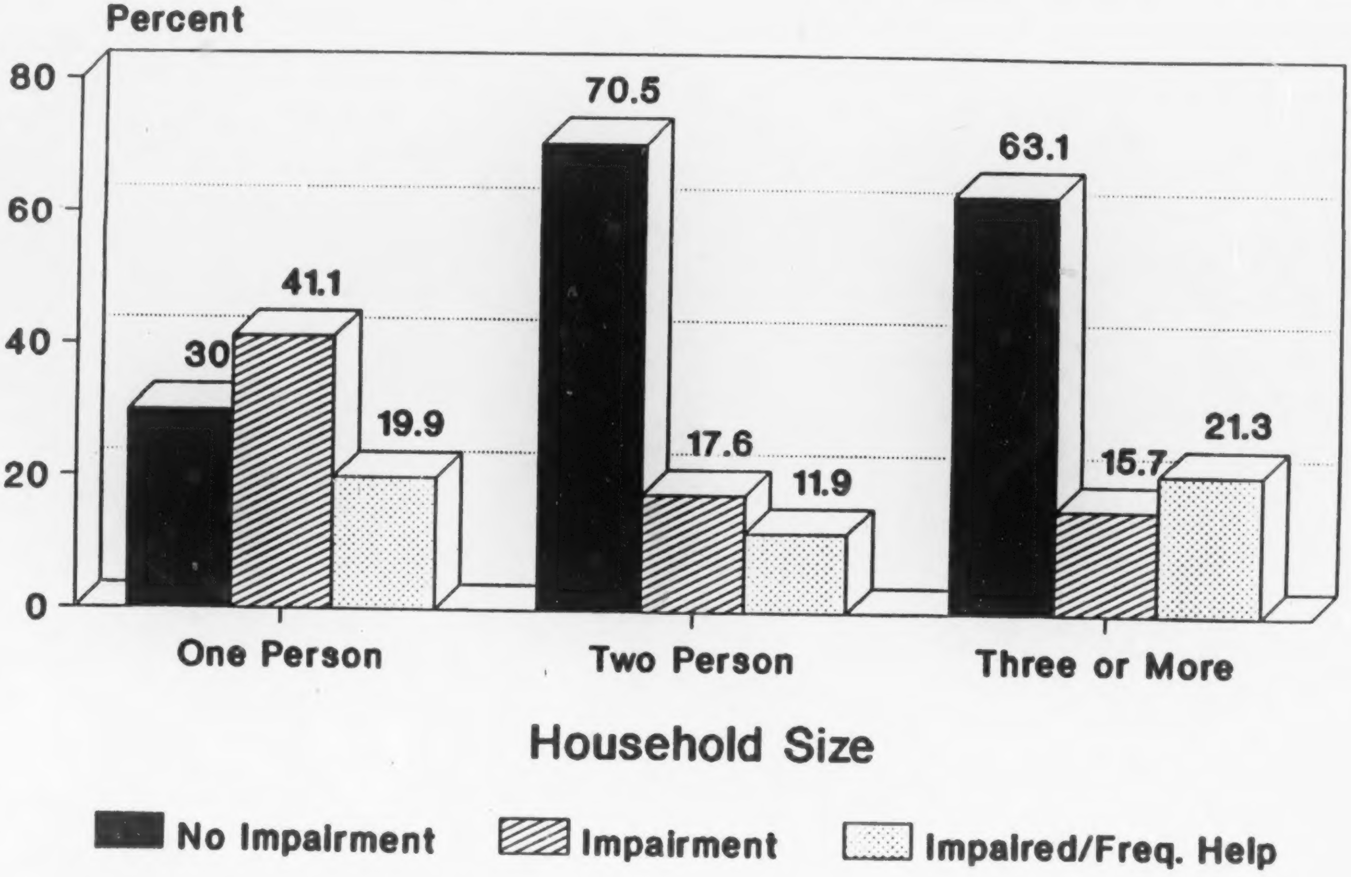
	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 +
No Impairment	78	74.5	72.9	64.1	47	40.3	23.8
Impaired	15.1	17.4	17.7	23.6	31	34.8	28.6
Impaired/Freq. Help	6.9	8.2	9.4	12.3	22	24.9	47.6

Age Groups

■ No Impairment
▨ Impaired
░ Impaired/Freq. Help

*Statistically Significant Differences

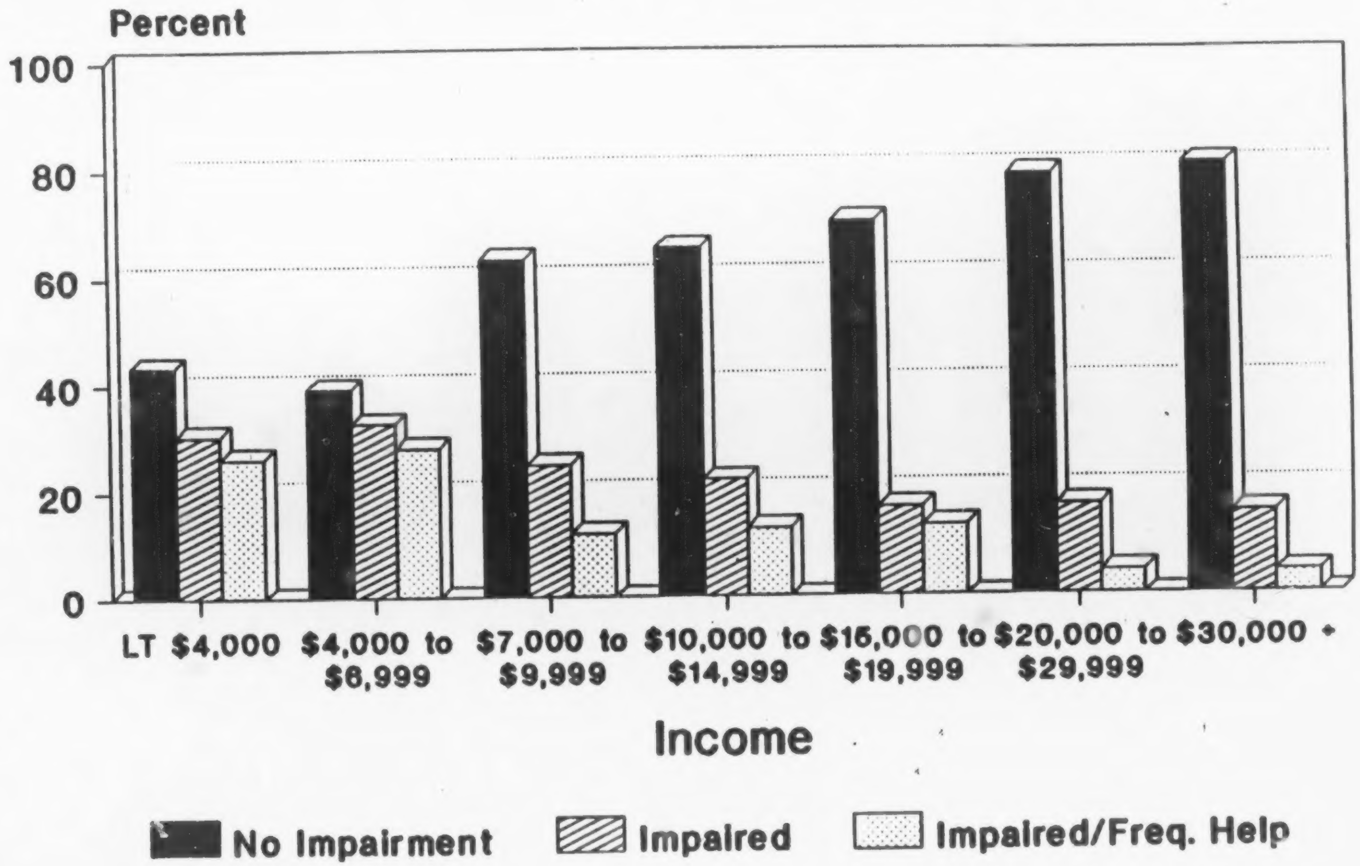
Figure 4 - 8



Presence or Absence of IADL Limitations and Frequent Assistance by Family Size*

*Statistically Significant Differences

Presence or Absence of IADL Limitations and Frequent Assistance by Income*



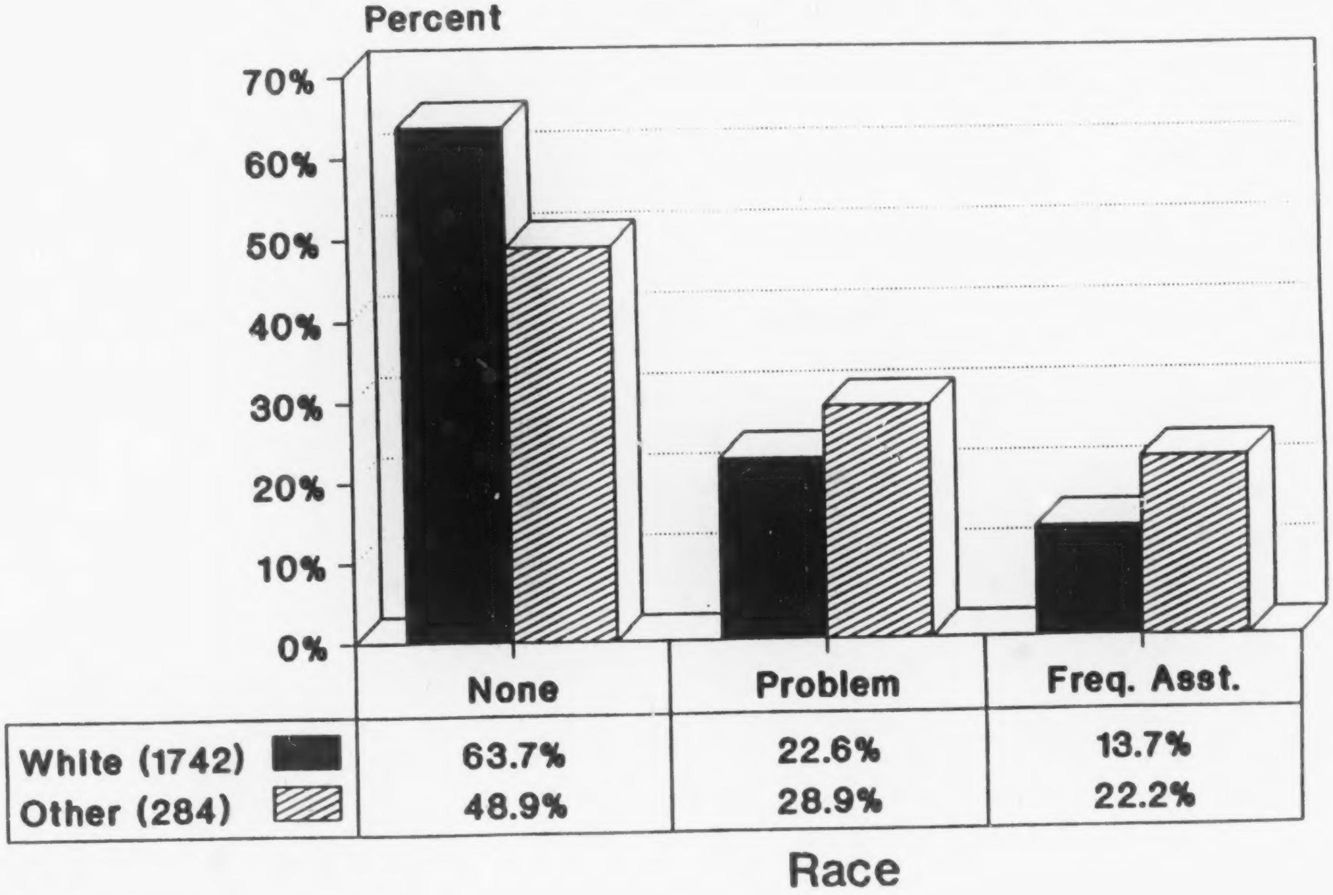
*Statistically Significant Differences

impairment. Non-whites also receive frequent assistance for IADLs at a substantially higher rate, 22.2%, than do whites, 13.7% (Figure 4-10). Medicaid recipients are more likely than non-medicaid recipients to report impairments and to receive frequent assistance (Figure 4-11). No statistically significant differences for IADL impairment are found for regions. Almost one-quarter of the elders with no insurance have at least one IADL impairment, and 8% receive frequent assistance (Figure 4-12).

4.3 Chronic Conditions/Physical Health Problems

More than 90% of the 85 or older cohort experience at least one chronic health problem. Approximately half are frequently or constantly impacted in their normal daily activities due to the problem(s). While many of the conditions which make up this scale are among the most life threatening, several others include less threatening but very bothersome chronic problems. For example, difficulty hearing or the presence of eye disease, or difficulty with teeth, gums or dentures definitely affect one's ability to carry out normal, daily activities but are not usually life-threatening problems. Although almost 60% of the youngest group report at least one of the chronic difficulties, only 16% report frequent or constant restriction of daily activities (Figure 4-13). These percentages are higher than those reported for chronic conditions in national studies such as the Longitudinal Study on Aging and the National Long Term Care Survey. The chronic conditions measures are

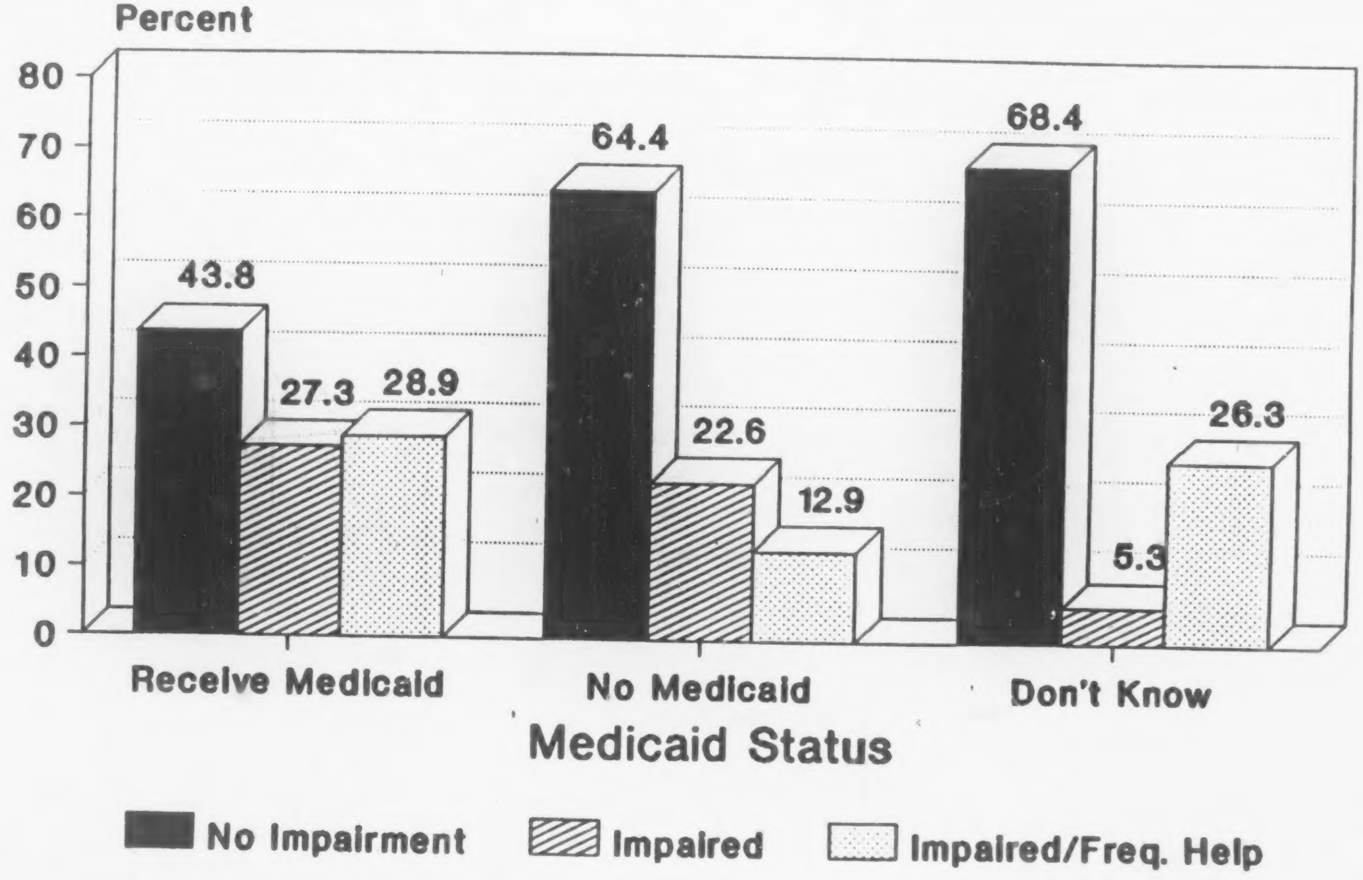
IADL Impairment and Need for Frequent Assistance by Race



	None	Problem	Freq. Asst.
White (1742) ■	63.7%	22.6%	13.7%
Other (284) ▨	48.9%	28.9%	22.2%

Statistically Significant at .0001

Figure 4 - 11

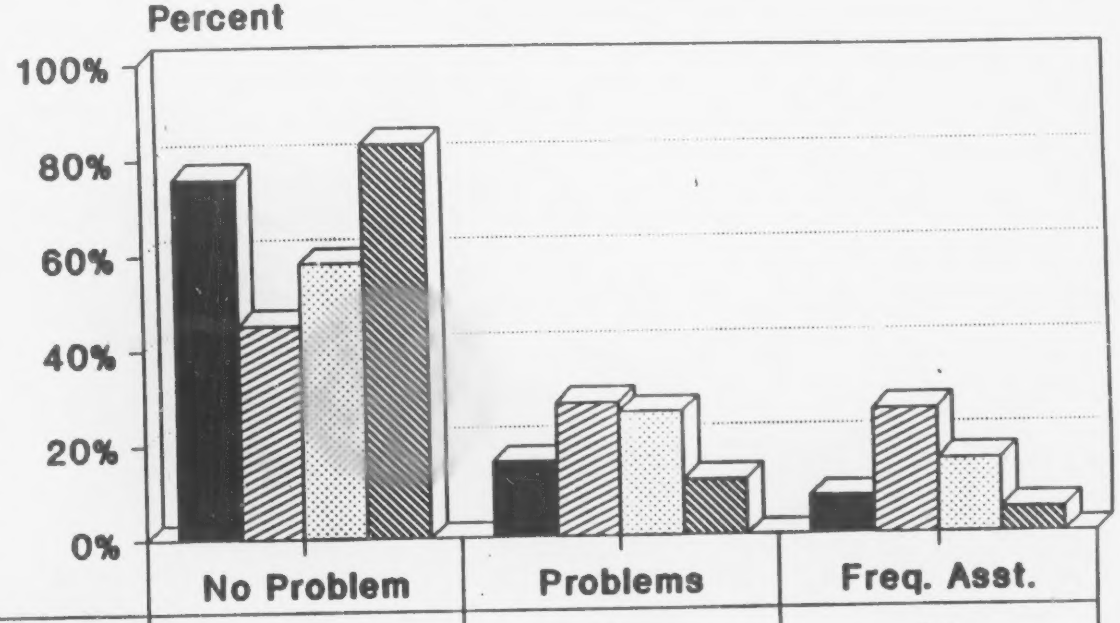


Presence or Absence of IADL Limitations and Frequent Assists by Medicaid Status*

*Statistically Significant Differences

Figure 4 - 12

IADL Impairment and Receipt of Frequent Assistance by Insurance



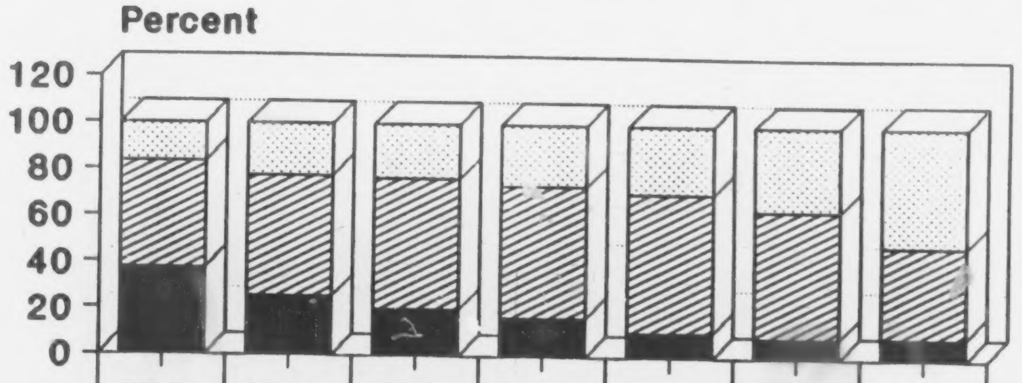
	No Problem	Problems	Freq. Asst.
None (188) ■	76.1%	16%	8%
Public (481) ▨	45.3%	28.3%	26.4%
Mix (1128) ░	58.2%	26.2%	15.6%
Private (458) ▧	83%	11.8%	5.2%

Insurance

Statistically Significant at .0001

Figure 4 - 13

Presence or Absence of Chronic Problems and Frequent Limitations by Age*



	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 +
Freq/Constant Prob	16.4	22.3	23.8	26.4	29.4	36.4	51.6
Impaired/Occas. Prob	45.7	52.2	56.1	56.7	59.6	54.9	38.9
No Impairment	37.9	25.5	20.2	16.9	11	8.6	9.5

Age Groups

■ No Impairment
▨ Impaired/Occas. Prob
░ Freq/Constant Prob

*Statistically Significant Differences

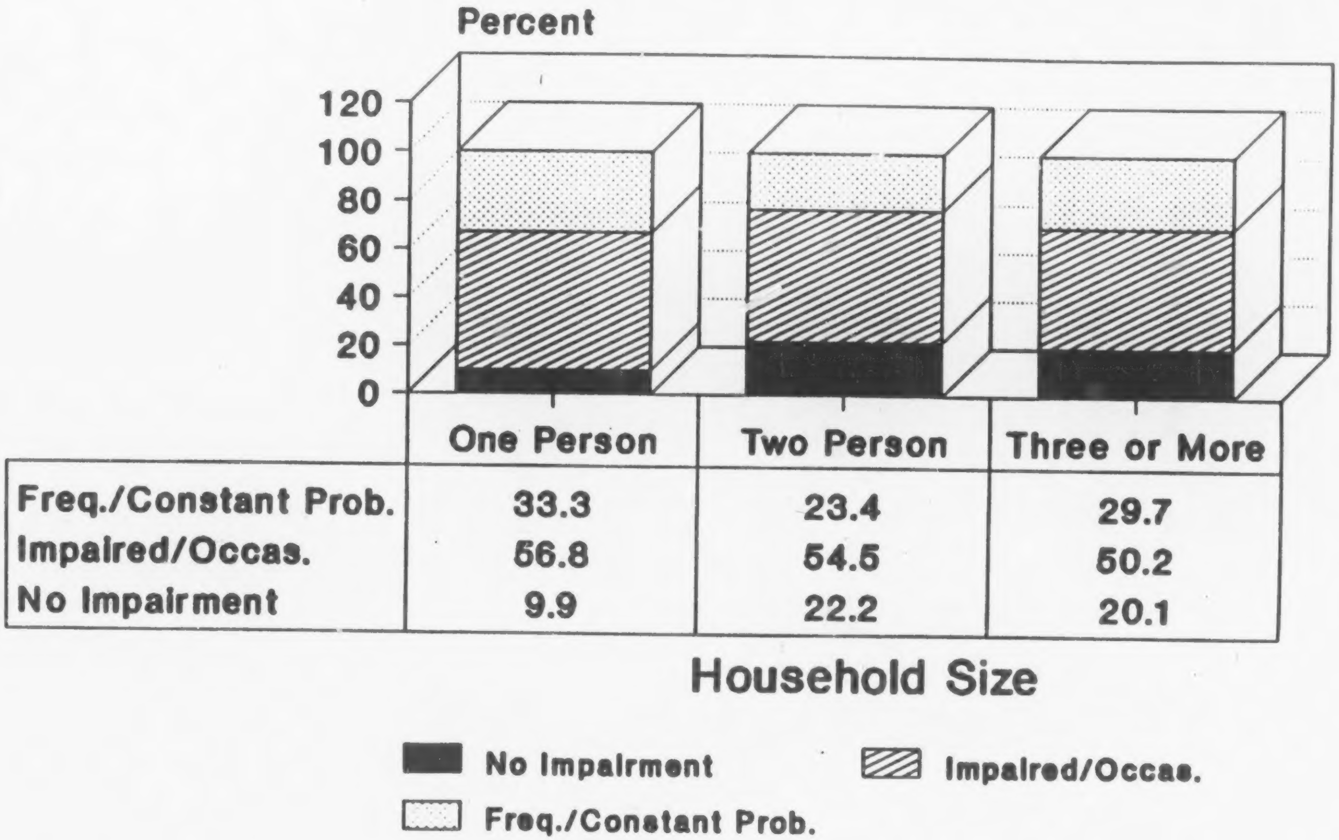
not equivalent in these studies, however. The Arkansas scales include a broader definition and more probes to identify chronic problems, thereby resulting in higher rates.

Individuals who live alone report the presence of problems more often than others, and they report frequent or constant restrictions more often than individuals in the other two categories (Figure 4-14). Individuals in the lowest income categories report more difficulties than others and more frequent or constant restriction as a result of those problems (Figure 4-15). Medicaid recipients have more impairments and are more likely to frequently or constantly limit their normal, daily activities (Figure 4-16). No significant racial or regional differences exist in the total chronic health impairment scale. However, almost 60% of elders with no insurance report one or more of the chronic conditions, and 16.5% are frequently or constantly impacted by one or more problems.

Specialized group impairment scales were also developed to reflect an interest in the kinds of problems that may often lead to a label of "disabled." Work completed in Texas in 1984 validated the use of several scales in the study of elders which were also of interest to other types of state agencies dealing with a wider range of age eligibility. These definitions were adapted in the Year I Arkansas project and refined in several other state samples. Although some of the original variables which produced a

Figure 4 - 14

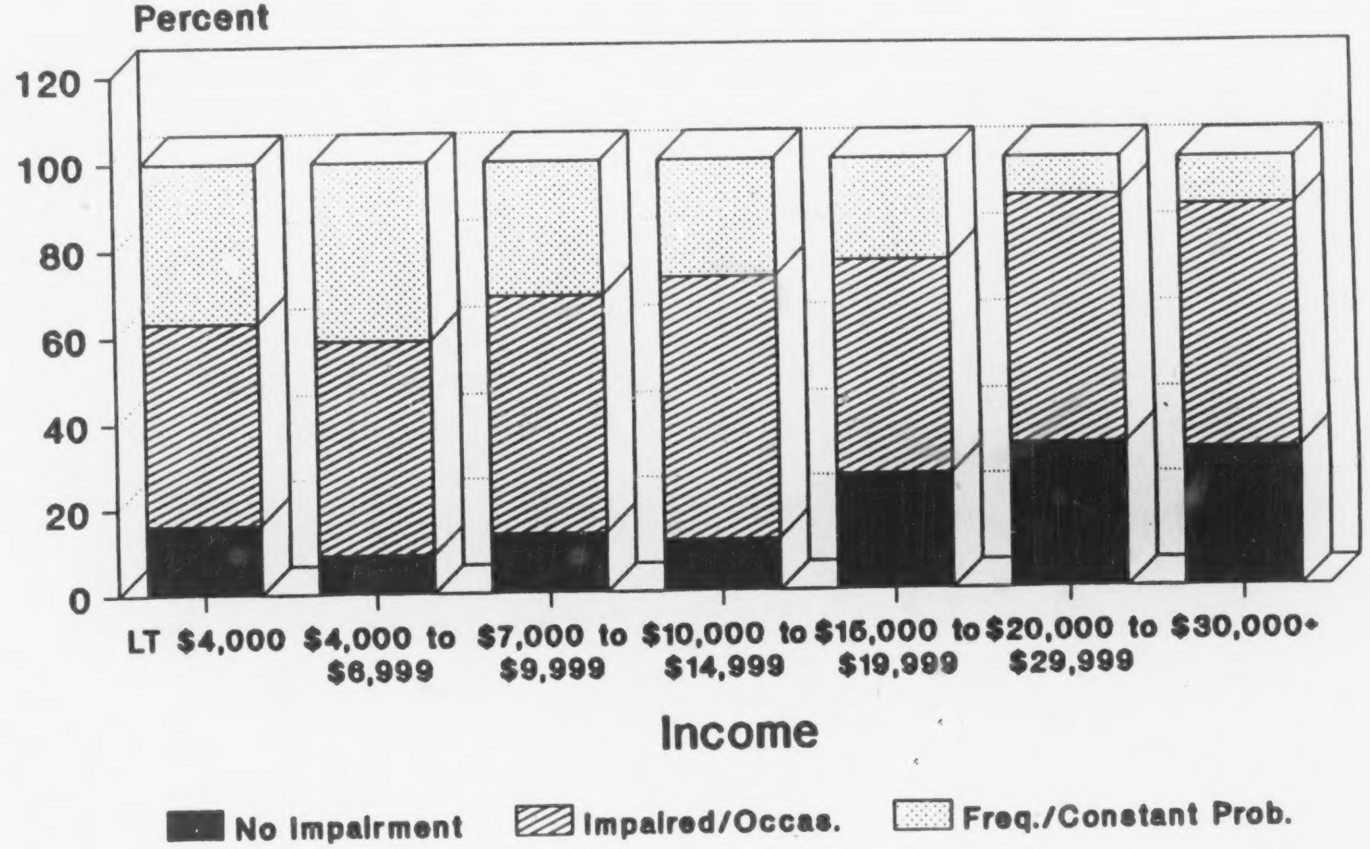
Presence or Absence of Chronic Problems and Frequent Limitations by Family Size*



	One Person	Two Person	Three or More
Freq./Constant Prob.	33.3	23.4	29.7
Impaired/Occas.	56.8	54.5	50.2
No Impairment	9.9	22.2	20.1

*Statistically Significant Differences

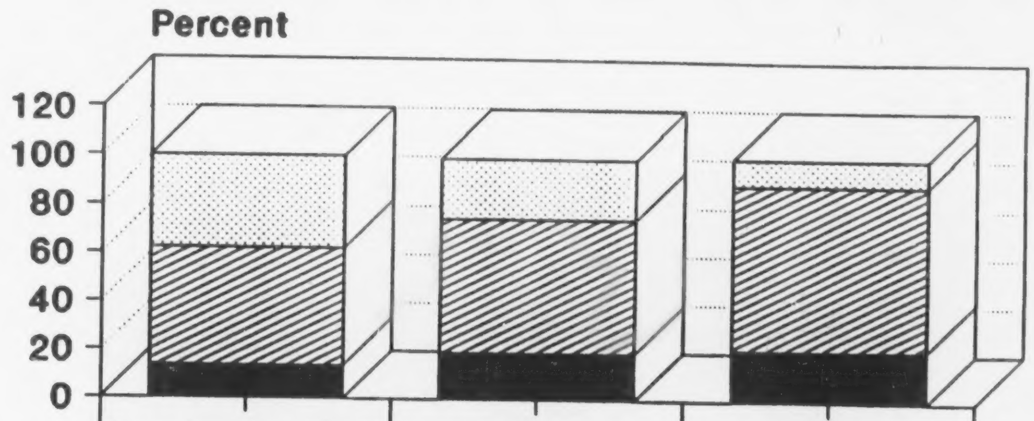
Presence or Absence of Chronic Problems and Frequent Limitations by Income*



*Statistically Significant Differences

Figure 4 - 16

Presence or Absence of Chronic Problems and Frequent Restrictions by Medicaid*



	Receive Medicaid	No Medicaid	Don't Know
Freq./Constant Prob.	38	25	10.5
Impaired/Occas.	48.4	55	68.4
No Impairment	13.6	19.5	21.1

Medicaid Status

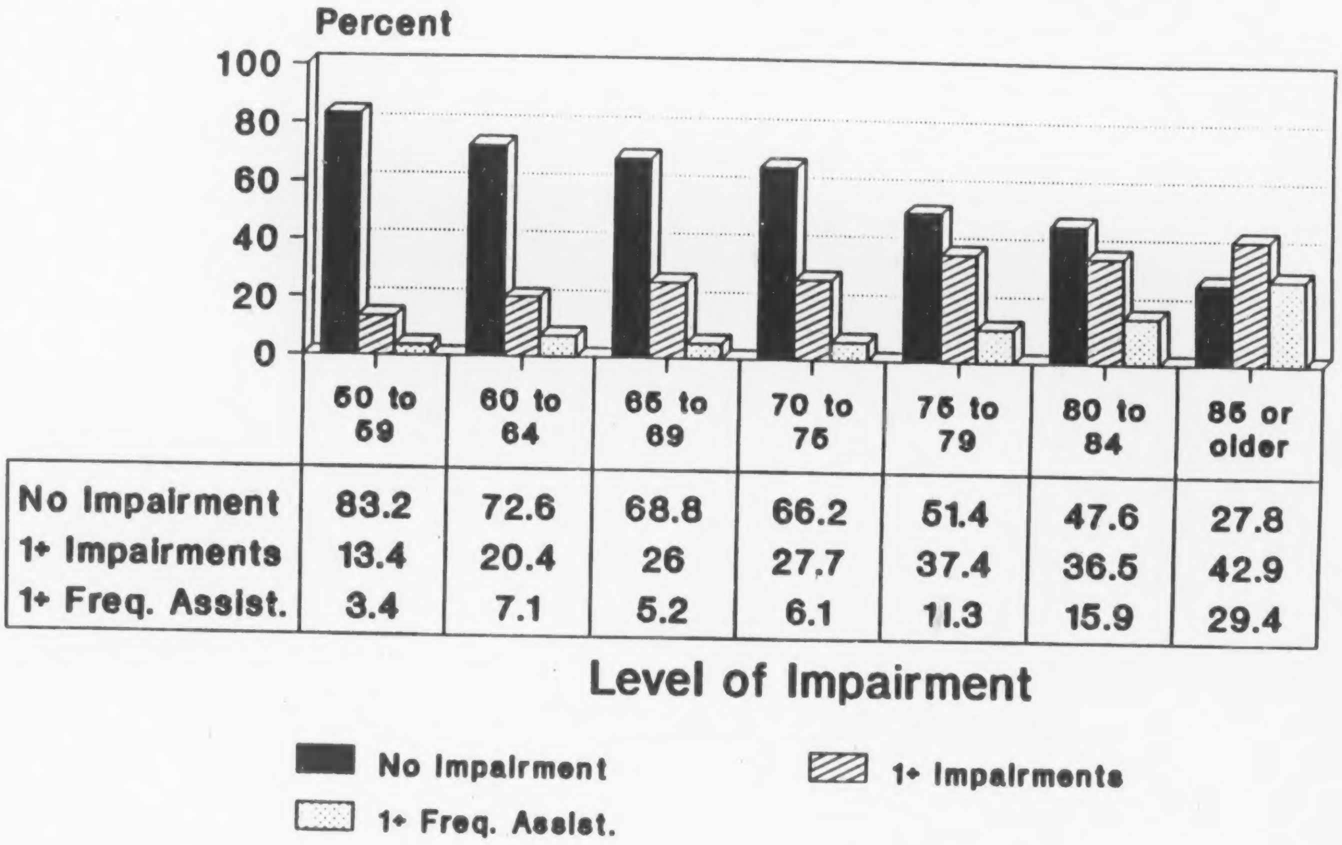
*Statistically Significant Differences

measure of mobility impairment were dropped in the Year II study, many of the scales remain intact for further analysis. **Communication impairment** was measured by a report of difficulty using the phone, writing, hearing or speaking without hesitation. Individuals who reported a difficulty but are not frequently or constantly impaired or do not receive help on a daily basis are described in Figure 4-17 as impaired. Those who have these difficulties AND are frequently or constantly impacted or who receive help on a daily basis are described in the Frequently Impacted column. Figure 4-17 illustrates the relationship of age to prevalence and level of difficulty. Even in the youngest cohort, almost 17% report at least one difficulty although less than 4% are frequently or constantly impacted. Prevalence rates increase rather dramatically with more than half the 80 to 84 and 70% of the 85 or older reporting at least one problem. Almost 30% of the 85 or older are frequently or constantly impacted.

Individuals living alone are more likely to report a difficulty than other household types, but more frequent impact is reported by an almost equal proportion of single person households and households of three or more (Figure 4-18). Difficulties are concentrated in lower income households (under $7,000) as is more serious impact (Figure 4-19). Non-whites are more likely than whites to report a difficulty and to report frequent impact on activities (Figure 4-20). No regional differences are noted.

Figure 4 - 17

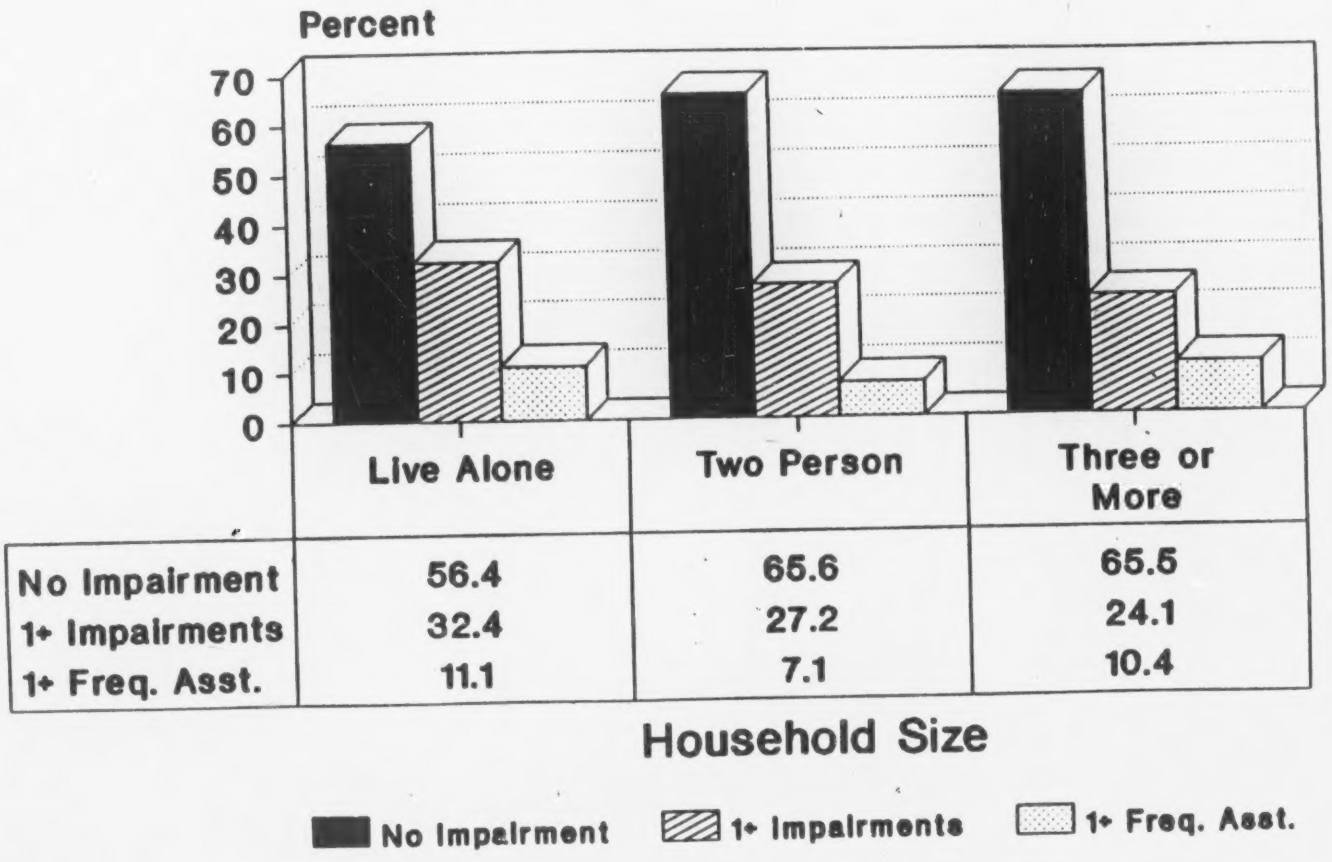
Communication Impairment and Need for Frequent Assistance by Age



	50 to 59	60 to 64	65 to 69	70 to 75	75 to 79	80 to 84	85 or older
No Impairment	83.2	72.6	68.8	66.2	51.4	47.6	27.8
1+ Impairments	13.4	20.4	26	27.7	37.4	36.5	42.9
1+ Freq. Assist.	3.4	7.1	5.2	6.1	11.3	15.9	29.4

P=<.0001

Communication Impairment and Need for Frequent Assistance by Household Size

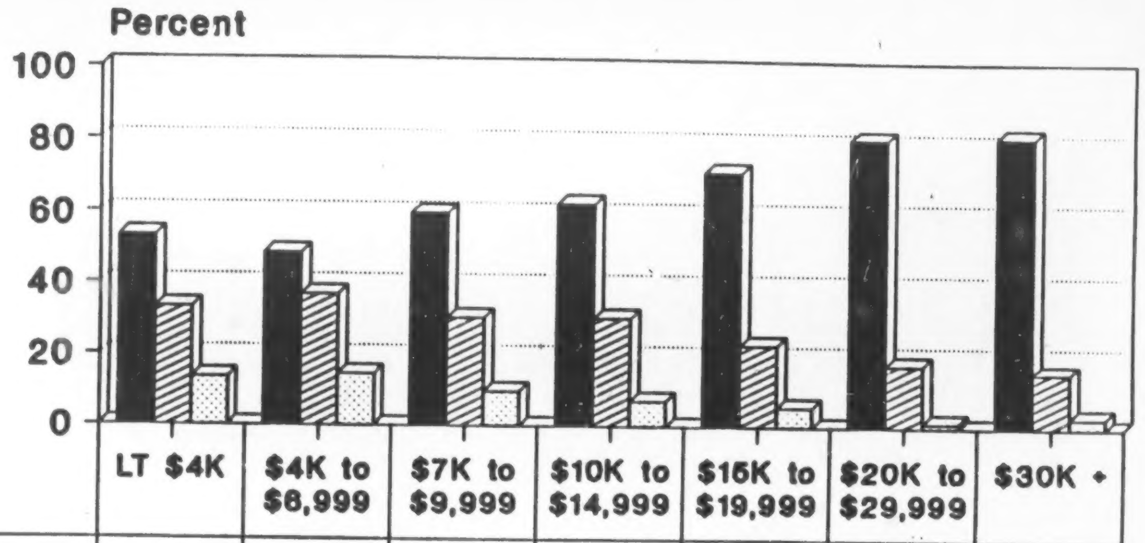


	Live Alone	Two Person	Three or More
No Impairment	56.4	65.6	65.5
1+ Impairments	32.4	27.2	24.1
1+ Freq. Asst.	11.1	7.1	10.4

P=<.0007

Figure 4 - 19

Communication Impairment and Need for Frequent Assistance by Income



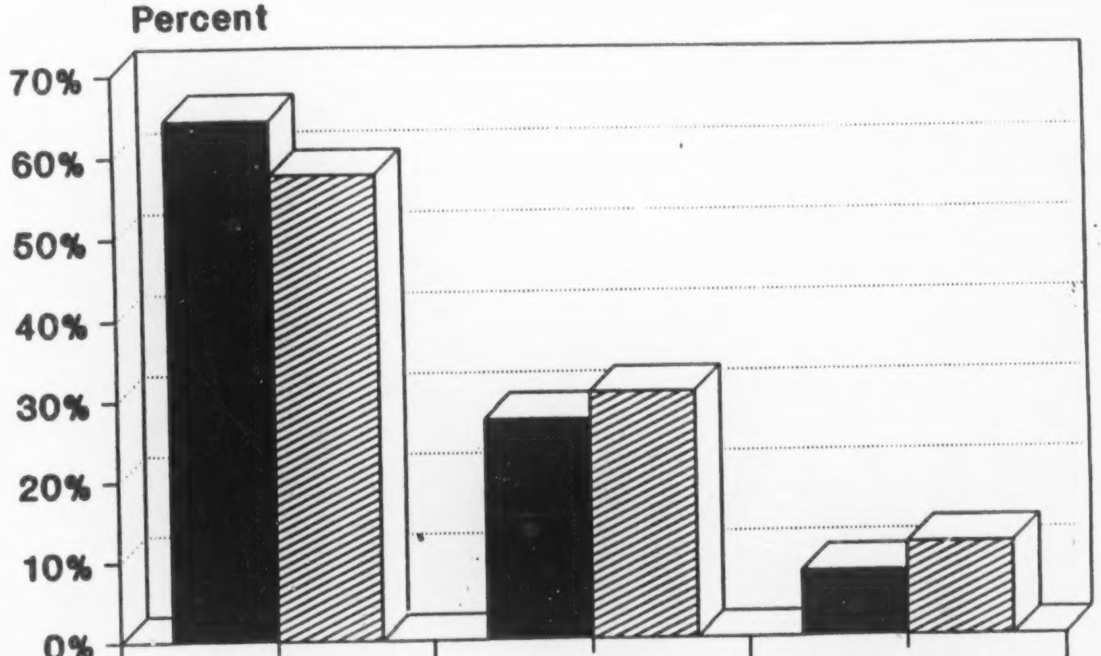
	LT $4K	$4K to $6,999	$7K to $9,999	$10K to $14,999	$15K to $19,999	$20K to $29,999	$30K +
No Impairment	53.2	48.6	59.6	62.4	71.5	80.9	81.7
1+ Impairments	33.3	36.9	30.5	30.5	22.9	17.6	15.4
1+ Freq. Asst.	13.5	14.5	9.8	7.1	5.6	1.5	3

Income

■ No Impairment ▨ 1+ Impairments ░ 1+ Freq. Asst.

P=<.0001

Communication Impairment
By Race



	None	Impaired	Freq. Asst.
White (1742) ■	64.5%	27.4%	8.2%
Other (284) ▨	57.7%	30.6%	11.6%

Race

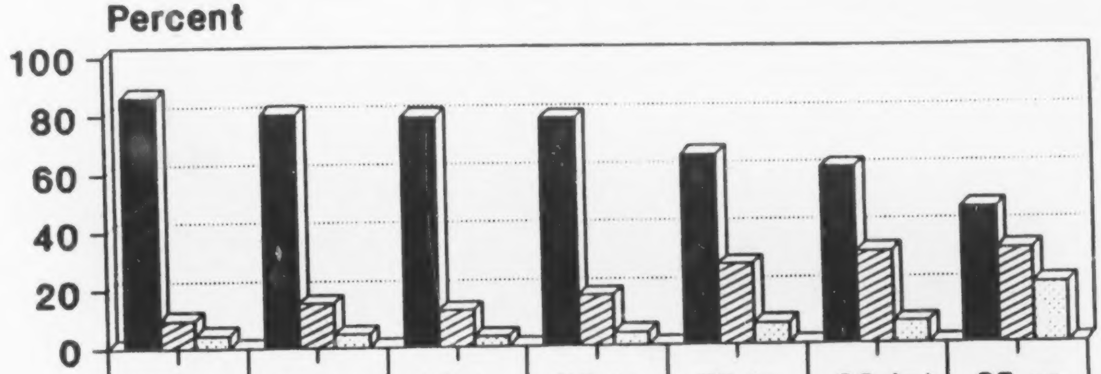
Statistically Significant at .05

Cognition impairment is measured by positive responses to difficulty managing business affairs, remembering events that occurred long ago or recently, understanding instructions, or Alzheimer's disease. If individuals report the presence of one or more of these problems with no corresponding impact, they are described in Figure 4-21 as impaired. Those with these difficulties AND corresponding frequent or constant limitation on normal daily activities as a result of these problems are described as frequently or constantly impacted. Almost 14% of the youngest cohort report at least one difficulty, but less than 5% are frequently impacted (Figure 4-21). The prevalence of difficulties increases steadily with age but the percent of frequent or constant impact remains under 8% for all but the oldest cohort. Almost 21% of the 85 or older group are frequently or constantly impacted this difficulty.

Individuals living alone report almost double the prevalence rate of problems than do individuals in other household structures. However, elders living in a household of three or more report more frequent impact than other household types (Figure 4-22). Nonwhites report more problems and are more seriously impaired than white elders (Figure 4-23). Frequent or constant impairment is associated with lower incomes (Figure 4-24). No regional differences are noted.

Two types of mental health impairment scales are developed for use in the ALSHA. One general scale,

Cognition Impairments and Frequent Impact on Daily Activities by Age



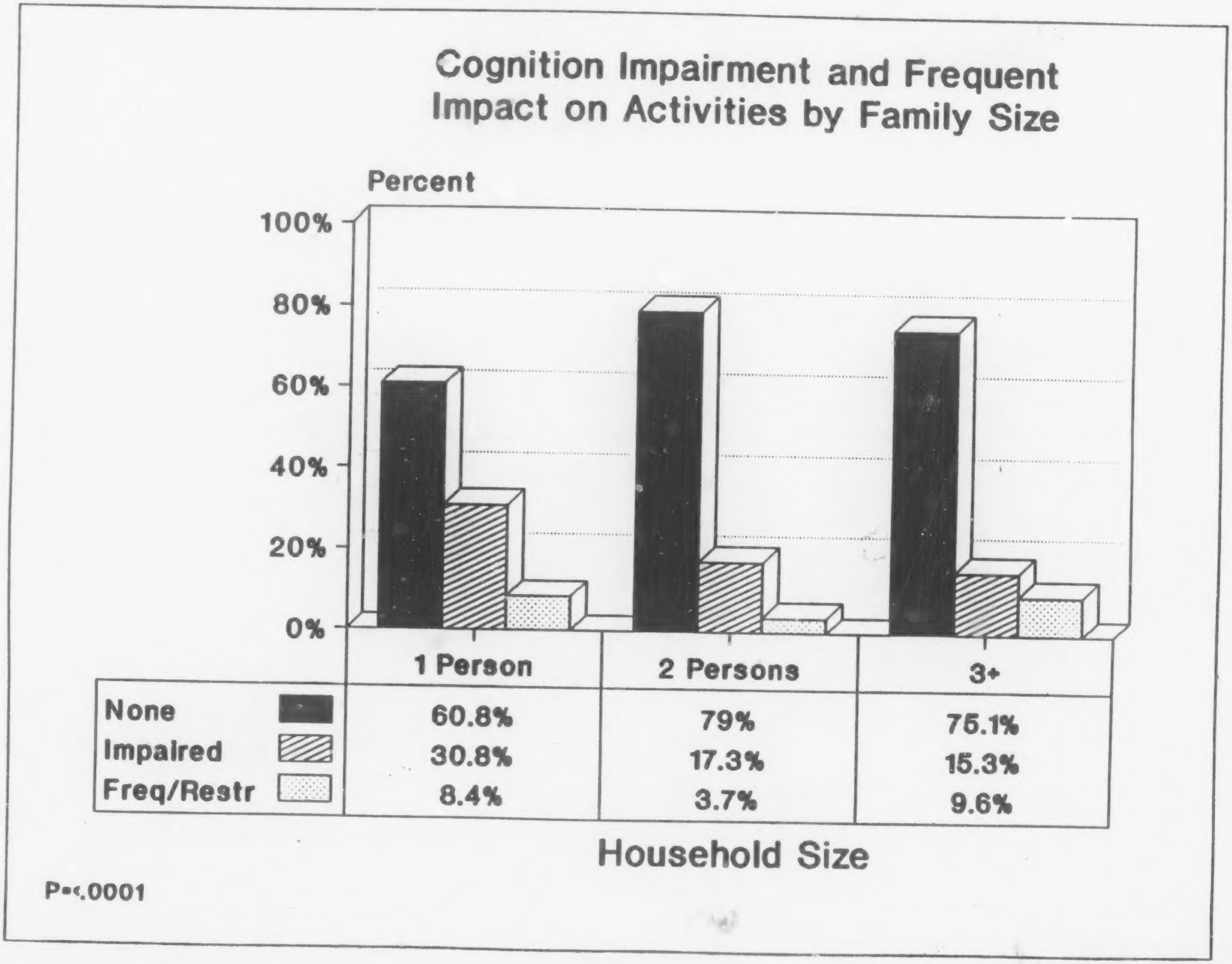
	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 or older
No Impairments	86.2	80.2	79.1	78.4	65.4	60.9	46.8
1+ Impairments	9.5	15.2	12.5	17.3	27.5	31.8	32.5
1+ Freq. Impacted	4.3	4.6	3.4	4.3	7.1	7.3	20.6

Age

■ No Impairments
▨ 1+ Impairments
░ 1+ Freq. Impacted

P=<.0001

Figure 4 - 22



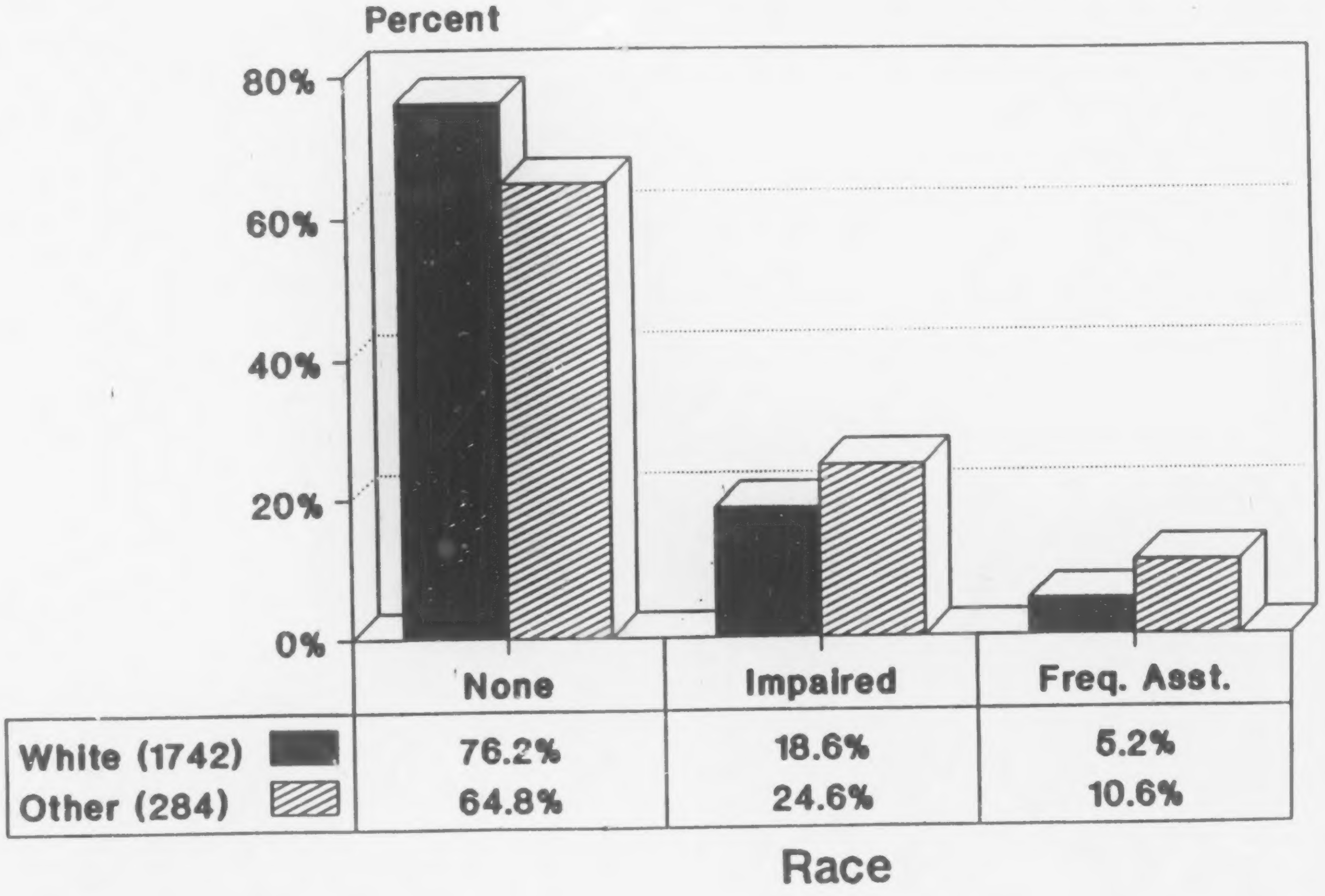
Cognition Impairment and Frequent Impact on Activities by Family Size

	1 Person	2 Persons	3+
None ■	60.8%	79%	75.1%
Impaired ▨	30.8%	17.3%	15.3%
Freq/Restr ░	8.4%	3.7%	9.6%

P=<.0001

Figure 4 - 1

Cognitive Impairment
By Race

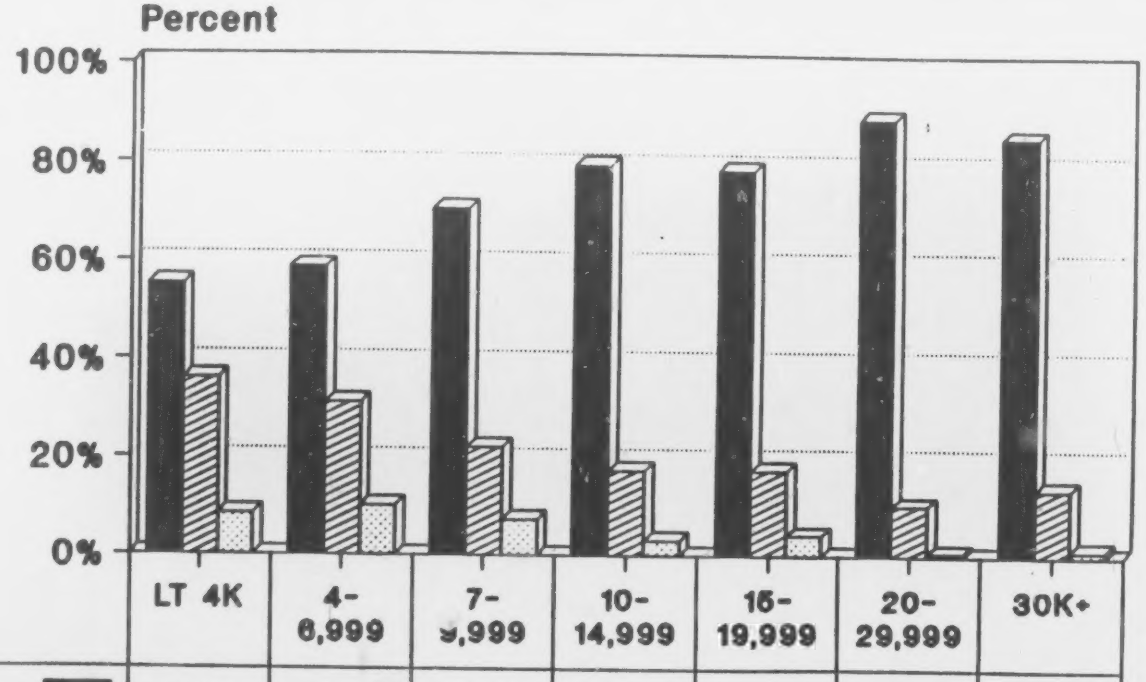


	None	Impaired	Freq. Asst.
White (1742) ■	76.2%	18.6%	5.2%
Other (284) ▨	64.8%	24.6%	10.6%

Statistically Significant at .0001

Figure 4 - 24

Cognition Impairments and Frequent Impact on Activities by Income Status



	LT 4K	4-6,999	7-9,999	10-14,999	15-19,999	20-29,999	30K+
None ■	55.3%	58.7%	70.5%	79.4%	78.5%	89%	85.2%
Impaired ▨	36.2%	31.2%	22.1%	17.4%	17.4%	10.3%	13.6%
Freq/Restr ░	8.5%	10.1%	7.4%	3.2%	4.2%	0.7%	1.2%

Income

P=<.0001

applicable to all elders in the sample, identifies individuals who report difficulty with depression or stress, other emotional problems or the presence of Alzheimer's or Parkinson's Disease. Just over 15% of the elders have one or more problems. Presence of more than one of the problems is rare with slightly more than 2% reporting two or more difficulties. Presence of problems is significantly associated with increasing age and lower income levels. Women are more likely than men to report difficulties, and individuals living alone are more likely to be impaired than are others (Table 4-1).

In Wave II, a substantially expanded mental health scale was developed for use only with respondents. Application of the scale to respondents permitted a much more in-depth analysis of variables which relate to depressive symptoms. A cumulative score was developed for individuals who indicate the presence of any of the above problems AND/OR sometimes or frequent problems with falling or staying asleep, crying, feeling lonely, lack of appetite, AND/OR indication of dissatisfied or very dissatisfied with life.

This scale taps several dimensions of mental health and would be expected to more accurately identify mental health impairments and to identify more of them. That expectation is borne out in the findings. More than half the respondents report at least one difficulty, and almost 19% report three or more. The number of problems is

TABLE 4-1

PREVALENCE OF MENTAL HEALTH PROBLEMS (ALL SAMPLE)

	None	One	Two	Three+
	(1875)	(297)	39	7
	84.5%	13.4%	1.8%	0.3%
Age				
55 to 59	89.5	7.5	2.2	0.9$^{.001}$
60 to 64	85.3	12.0	2.7	--
65 to 69	86.3	11.9	1.8	--
70 to 74	86.1	12.9	0.7	0.4
75 to 79	83.9	14.4	1.4	0.3
80 to 84	77.9	19.9	2.2	--
85+	75.4	20.6	2.4	1.6
Race				
White	84.6	13.5	1.7	0.2$^{.67}$
Other	84.2	13.4	2.5	--
Gender				
Male	90.1	8.6	1.2	0.1$^{.0001}$
Female	81.4	16.1	2.0	0.4
Income				
LT $4000	83.5	16.5	--	--$^{.0001}$
$4K to $6999	75.7	21.2	2.9	0.3
$7K to $9999	83.0	13.4	3.5	--
$10K to $14999	84.3	14.6	1.1	--
$15K to $19999	88.7	9.9	1.4	--
$20K to $29999	91.2	7.4	0.7	0.7
$30,000+	95.2	4.8	--	--
Household Size				
Live alone	75.0	21.9	2.5	0.7$^{.0001}$
Two	88.6	9.9	1.3	0.2
Three+	84.3	13.3	2.4	--

TABLE 4-1

PREVALENCE OF MENTAL HEALTH PROBLEMS (ALL SAMPLE)

	None	One	Two	Three+
	(1875)	(297)	39	7
	84.5%	13.4%	1.8%	0.3%
Region				
I	84.4	13.2	2.0	$0.4^{.72}$
II	84.5	13.3	1.9	0.3
III	86.7	10.4	2.2	0.7
IV	86.2	11.5	2.3	--
V	84.8	14.4	0.8	--
VI	80.9	15.6	3.1	0.4
VII	86.2	12.1	1.2	0.4
VIII	84.7	14.6	0.4	0.4

significantly related to increasing age and lower income (Table 4-2). Non whites have significantly more multiple impairments than whites, and women have substantially higher rates than men. This finding must be tempered with the reminder that some of the symptoms associated with this scale do not bear the same "social desirability" costs for women as they do for men. No regional differences are noted.

4.4 Service Utilization and Unmet Needs

4.4.1 **In-Home Health and Personal Care:** In the Year I report, an analysis was presented of each individual service probe and the respondent's use or perceived need for that service. A second type of variable was also used to identify individuals potentially in need of service through the use of followup questions to each of the ADL and IADL probes. The responses to each individual query are presented in the technical tables. However, in this section of the report, responses to those single variable probes are combined into three scales of service utilization or need. The first scale identifies individuals who use formal or informal help for in-home health and personal care needs. Generally, these services respond to problems caused by difficulties in activities of daily living, but they also include difficulty in self-medicating and need for in-home nursing or therapy services. The use of formal services is identified by counting the responses on the followup probe for who helps with ADL difficulty when the indication is

TABLE 4-2

PREVALENCE OF MENTAL HEALTH PROBLEMS (FOR RESPONDENTS ONLY)

	No Problem (725) 49.3%	One (295) 20.0%	Two (175) 11.9%	Three Or More (277) 18.8%
Age				
55 to 59	60.3	17.3	9.0	$13.5^{.002}$
60 to 64	51.9	17.4	13.3	17.4
65 to 69	57.1	18.0	9.0	15.9
70 to 74	49.1	22.2	11.3	17.4
75 to 79	40.8	20.8	14.7	23.7
80 to 84	40.2	24.4	11.0	24.4
85 or older	36.9	21.4	19.0	22.6
Race/Ethnic				
White	50.9	20.6	11.2	$17.3^{.002}$
Other	45.0	13.5	16.5	25.0
Gender				
Male	66.2	15.7	6.5	$11.5^{.0001}$
Female	43.7	21.4	13.7	21.2
Income				
LT $4000	38.3	20.0	15.0	$26.7^{.0001}$
$4K to $6999	38.6	19.9	12.7	28.8
$7K to $9999	40.9	24.9	13.0	21.2
$10K to $14999	53.8	19.8	11.5	14.8
$15K to $19999	61.2	12.9	14.1	11.8
$20K to $29999	67.1	10.6	12.9	9.4
$30,000+	68.6	22.9	5.7	2.9
Household **Size**				
Live alone	37.3	20.4	13.8	$28.5^{.0001}$
Two person	57.0	20.3	10.8	11.9
Three or more	54.9	17.7	9.8	17.7
Region				
I	50.3	23.9	11.3	$14.5^{.79}$
II	49.5	21.1	12.7	16.7
III	47.8	19.6	12.5	20.1
IV	51.9	21.7	10.6	15.7

TABLE 4-2 (cont.)

PREVALENCE OF MENTAL HEALTH PROBLEMS
(FOR RESPONDENTS ONLY)

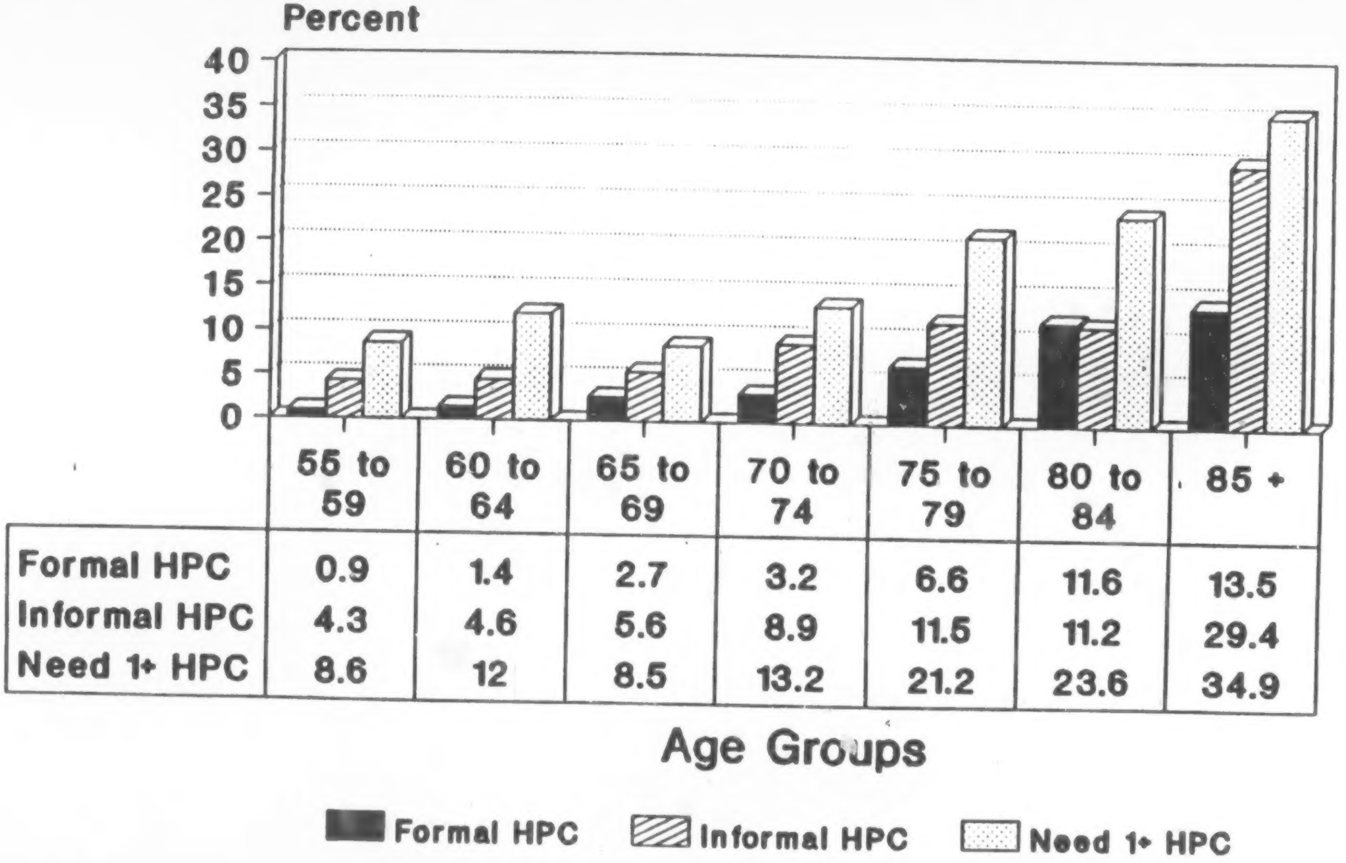
	No Problem	One	Two	Three Or More
	(725)	(295)	(175)	(277)
	49.3%	20.0%	11.9%	18.8%
V	48.3	19.9	10.8	21.0
VI	50.0	15.3	10.2	24.4
VII	48.2	15.9	15.2	20.7
VIII	50.3	20.4	11.4	18.0

that formal, paid help is used either alone or in combination with informal help. The use of informal help is identified by counting the number of times informal, unpaid help or a combination of formal and informal help is indicated on those same probes. Identifying levels of unmet need is determined by counting the number of responses which indicate that no help is received by someone who is having a difficulty. This measure, then, only identifies individuals who are receiving no service response at all for a particular problem. A different set of measures identifies individuals who are not receiving enough help but who are at least in the formal or informal service system in some way. The categories are not mutually exclusive. Individuals may be receiving formal services, informal services and also express at least one or more unmet needs.

Figure 4-25 summarizes the differences in use and need identified for age groupings. Formal, in-home health and personal care services are used by less than 5% of the sample of elders 55 or older. However, involvement in the formal sector does increase rather dramatically beginning in the 75 to 79 cohort and escalates to 13.5% for the 85 or older group. Utilization of informal assistance is just under 9% for the entire sample. By age cohort, utilization ranges from 4.3% in the youngest cohort to 29.4% among the oldest cohort. More than 15% of this sample have at least one difficulty where no one in either the formal or informal sector is responding. Over one-fifth of those elders 75 to

Figure 4 - 25

Use of Formal and Informal In-Home HPC and Unmet Need by Age*



	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 +
Formal HPC	0.9	1.4	2.7	3.2	6.6	11.6	13.5
Informal HPC	4.3	4.6	5.6	8.9	11.5	11.2	29.4
Need 1+ HPC	8.6	12	8.5	13.2	21.2	23.6	34.9

Health and Personal Care *Significant

84 have at least one unmet need, and almost 35% of the 85 or older cohort report this problem.

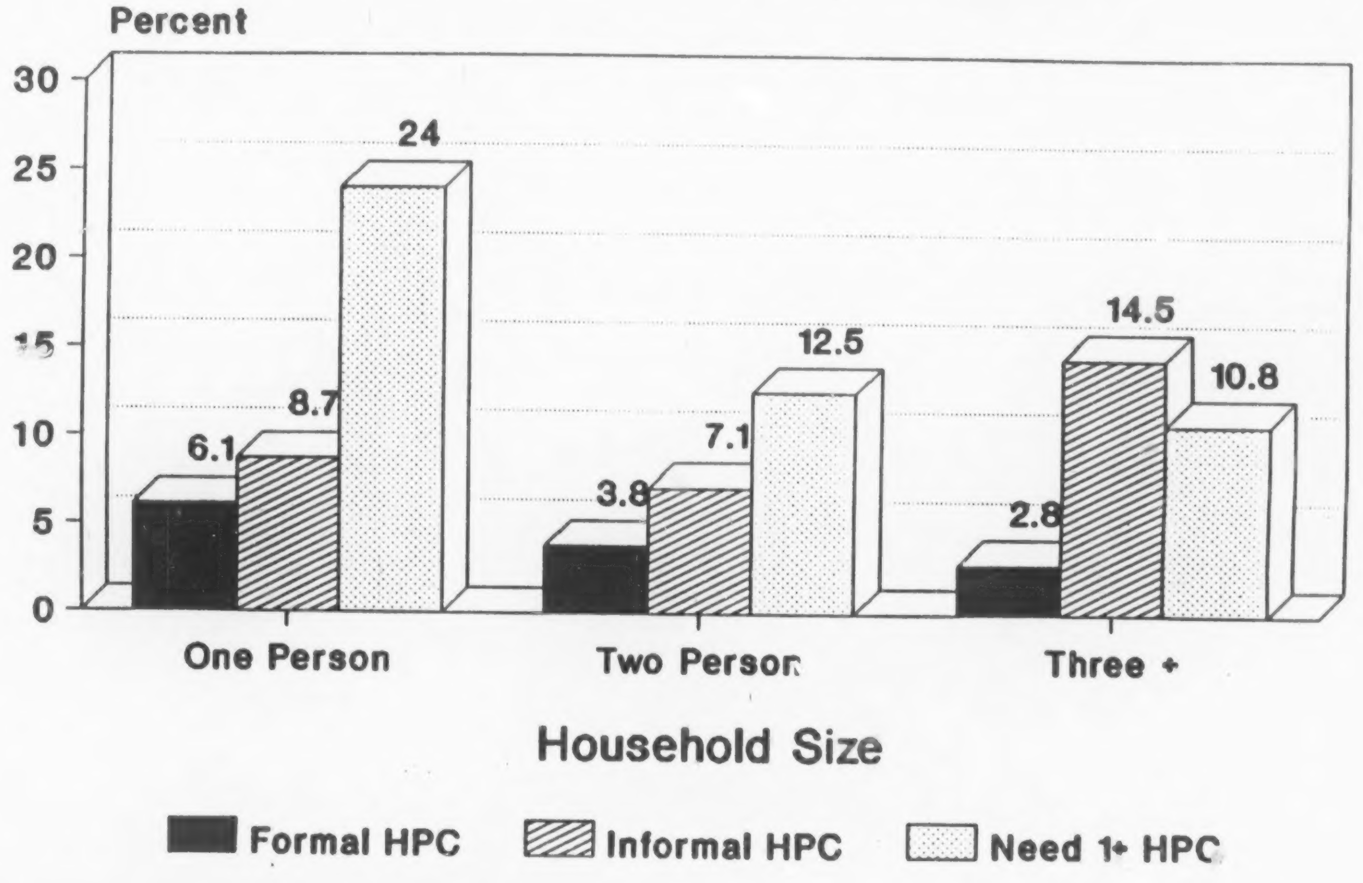
Elders living alone are more likely than others to access the formal service sector, 6.1%, while elders living in household of three or more receive more informal help than other groups, 14.5%. Unmet needs for in-home health or personal care assistance among elders living alone is double that of the other groups, 24% (Figure 4-26).

Utilization rates of formal services is highest among the lowest income categories and lowest at the upper income levels. The same pattern is identified for informal assistance and for levels of unmet need. These patterns are no doubt tied to the higher levels of ADL impairment identified in the lowest income categories. However, the fact that 7.1% of the highest income group have unmet needs for in-home health and personal care services may indicate lack of availability in some communities rather than any social or income barriers to access (Figure 4-27).

Women are more likely to utilize the formal service sector and report higher levels of unmet need than do males in this sample. However, no statistically significant differences are noted in the use of informal services (Figure 4-28). Racial differences are noted for formal and informal utilization and for unmet needs. The use of formal HPC among non-whites is more than double that of whites. Reliance on informal assistance is also significantly higher among non-whites than among whites. Slightly over one-fifth

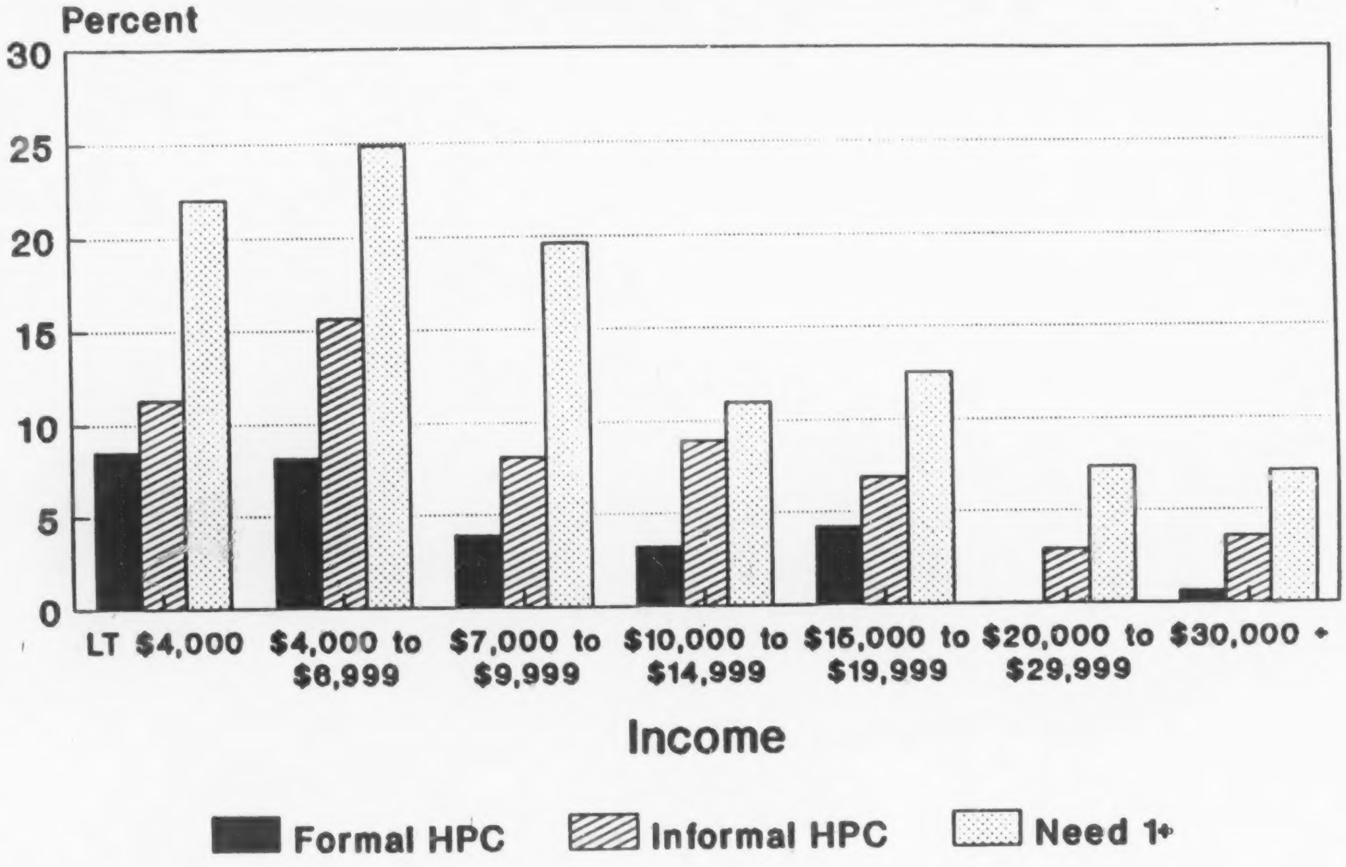
Figure 4 - 26

Use of Formal and Informal In-Home HPC and Need for Service by Household Size*



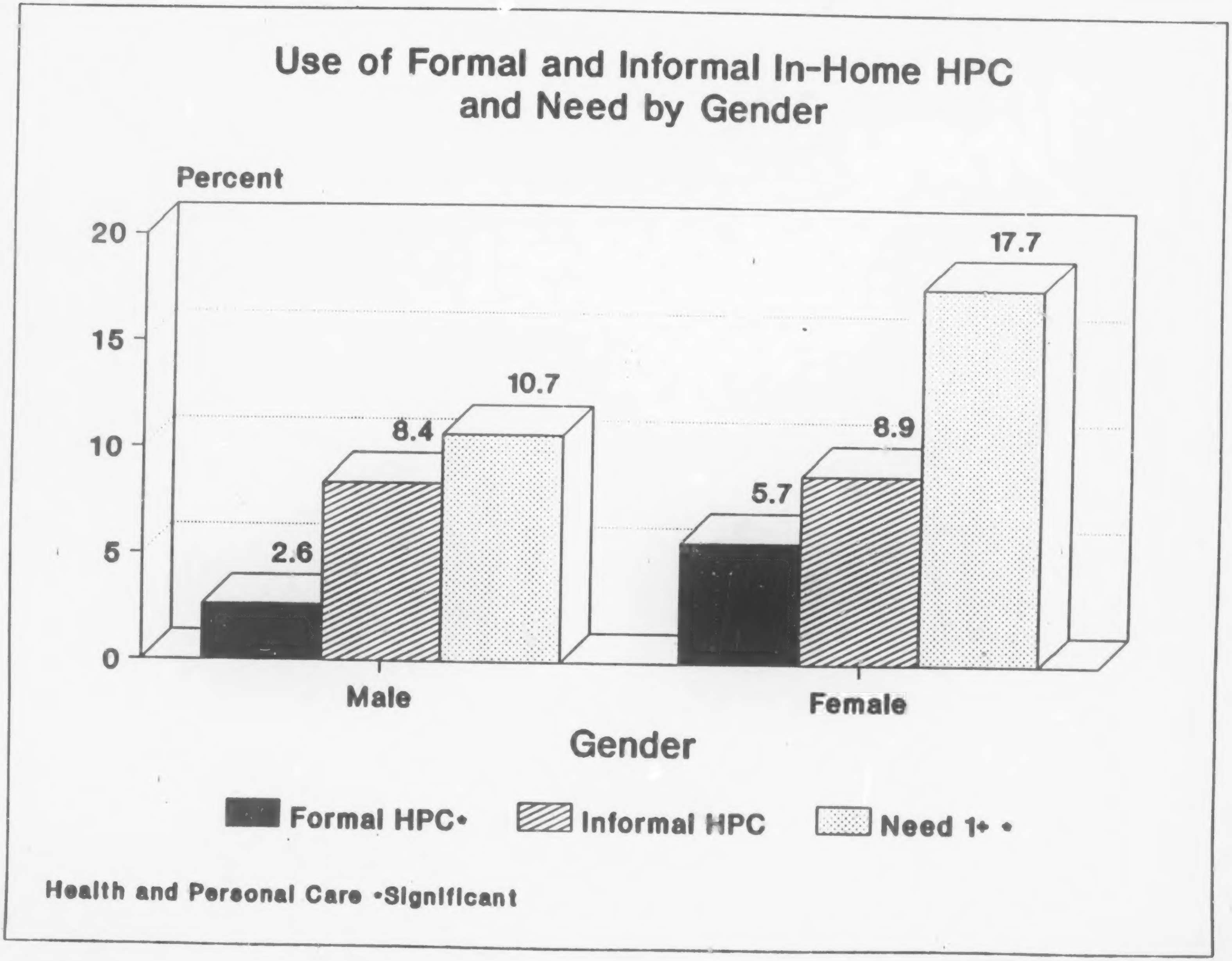
Health and Personal Care *Significant

Use of Formal and Informal IN-Home HPC and Unmet Need by Household Income*



Health and Personal Care •Significant

Figure 4 - 28


Use of Formal and Informal In-Home HPC and Need by Gender
Percent
20
15
10
5
0
2.6
8.4
10.7
5.7
8.9
17.7
Male
Female
Gender
Formal HPC•
Informal HPC
Need 1+ •
Health and Personal Care •Significant

of the minority elders have one or more difficulties for which no service response is received from formal or informal sectors compared to 14% for the whites (Figure 4-29).

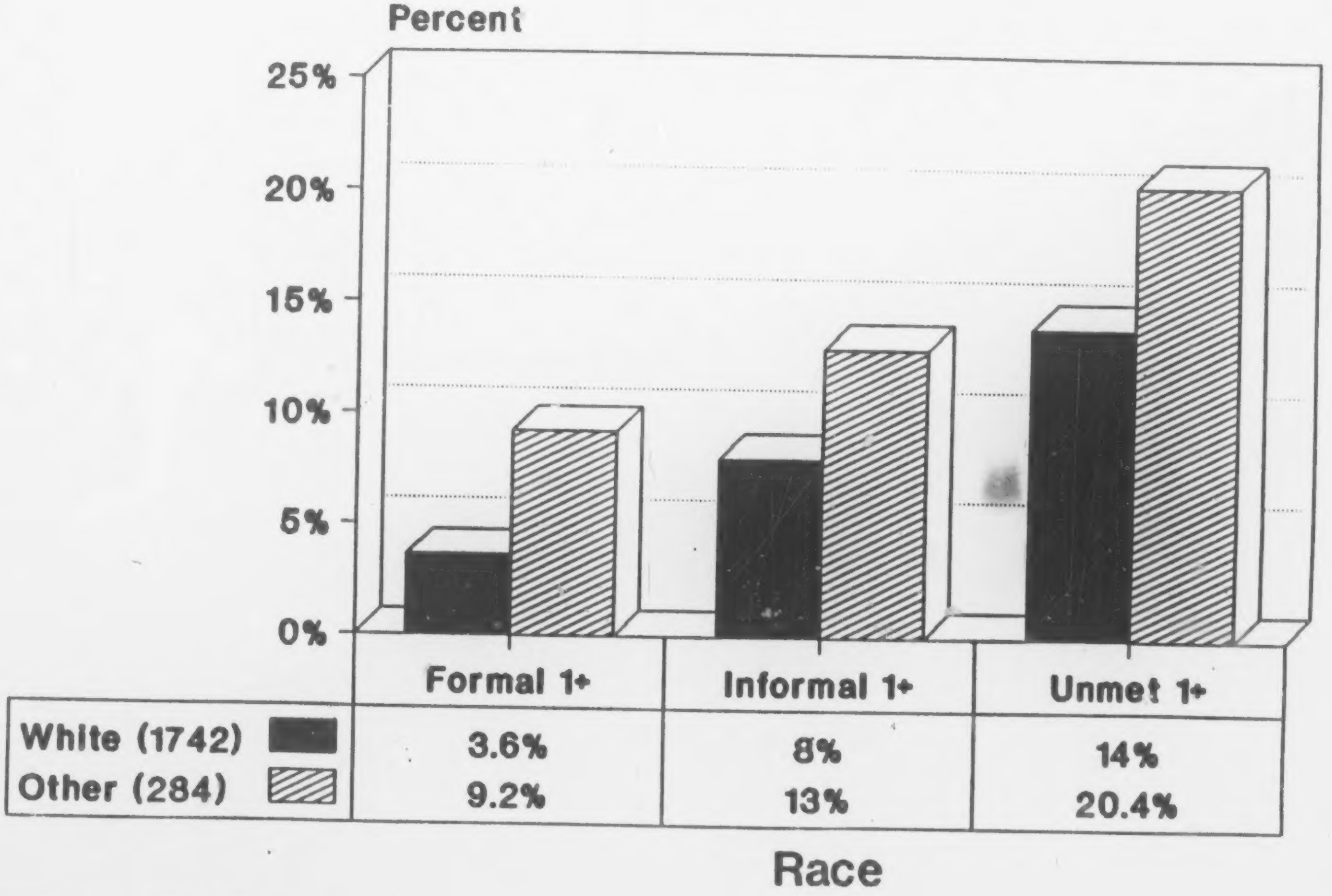
The receipt of Medicaid is linked with higher utilization rates than non-Medicaid recipients. This difference would be expected due to the much higher prevalence rate of health problems among the Medicaid recipient groups. Medicaid recipients also receive a substantially higher level of informal assistance than non-Medicaid recipients and report a level of unmet needs more than double that of the non-Medicaid population (Figure 4-30).

Use of formal services is negligible among individuals with no source of insurance and highest among those with publicly supported programs only. However, the use of informal services among the individuals covered by public sources is almost double the rate of formal service utilization, and almost one-quarter of these same individuals report one or more unmet needs (Figure 4-31).

4.4.2 In-Home Chore Services: Chore services or the so-called "low-tech" services respond to needs surrounding limitations in instrumental activities of daily living. The scales to measure formal and informal use and levels of unmet need are developed by the same method as that used for the in-home health and personal care scale. Followup probes

Figure 4 - 29

Use/Need of Health/Personal Care Service by Race

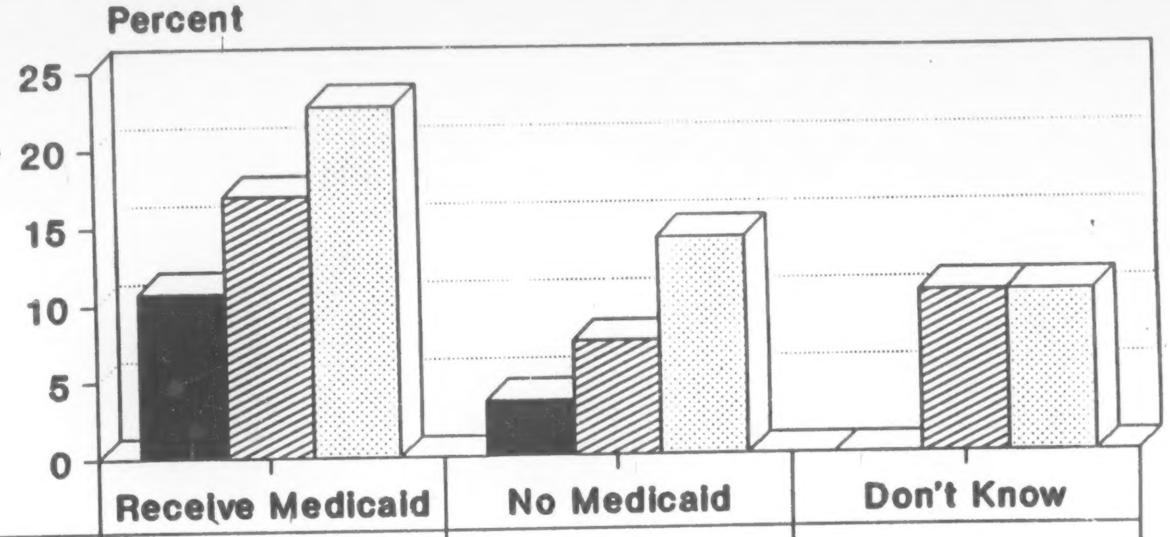


	Formal 1+	Informal 1+	Unmet 1+
White (1742) ■	3.6%	8%	14%
Other (284) ▨	9.2%	13%	20.4%

Statistically Significant at .008

Figure 4 - 30

Use of Formal and Informal In-Home HPC and Need for Services by Medicaid Status



	Receive Medicaid	No Medicaid	Don't Know
Formal HPC	10.7	3.6	0
Informal HPC	16.9	7.4	10.5
Need 1+ HPC	22.7	14.1	10.5

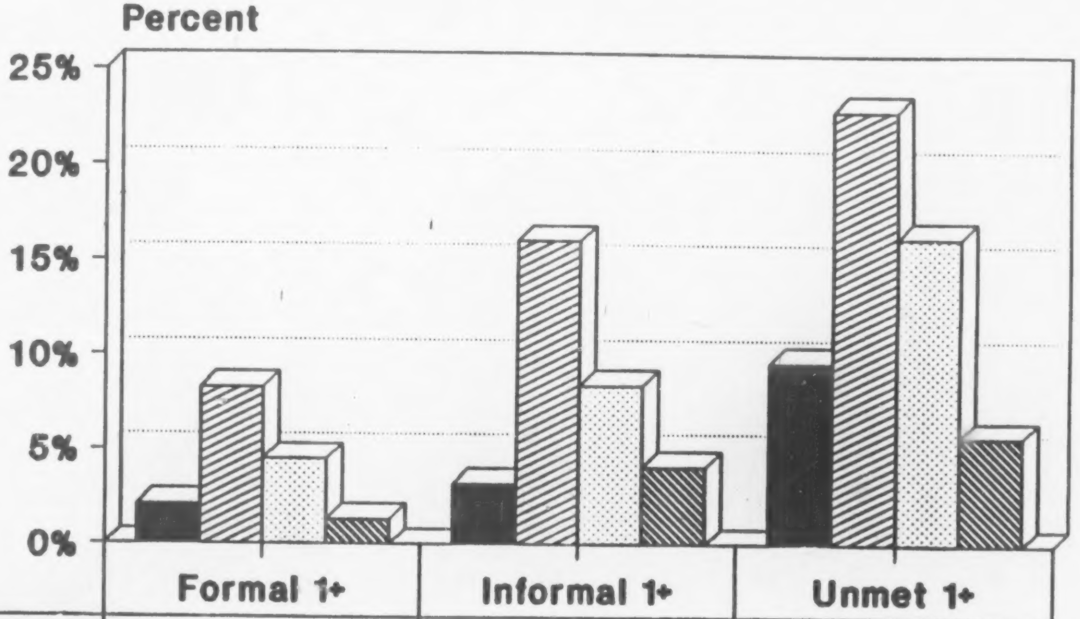
Medicaid Status

■ Formal HPC ▨ Informal HPC ░ Need 1+ HPC

Health and Personal Care •Significant

Figure 4 - 31

Use/Need of Health/Personal Care Service by Insurance



	Formal 1+	Informal 1+	Unmet 1+
None (188) ■	2.1%	3.2%	9.6%
Public (481) ▨	8.3%	16%	22.9%
Mix (1128) ░	4.5%	8.4%	16.2%
Private (458) ▧	1.3%	4.1%	5.7%

Insurance

Statistically Significant at .0001

about source of help were combined for the range of individual IADL probes on the Wave II instrument.

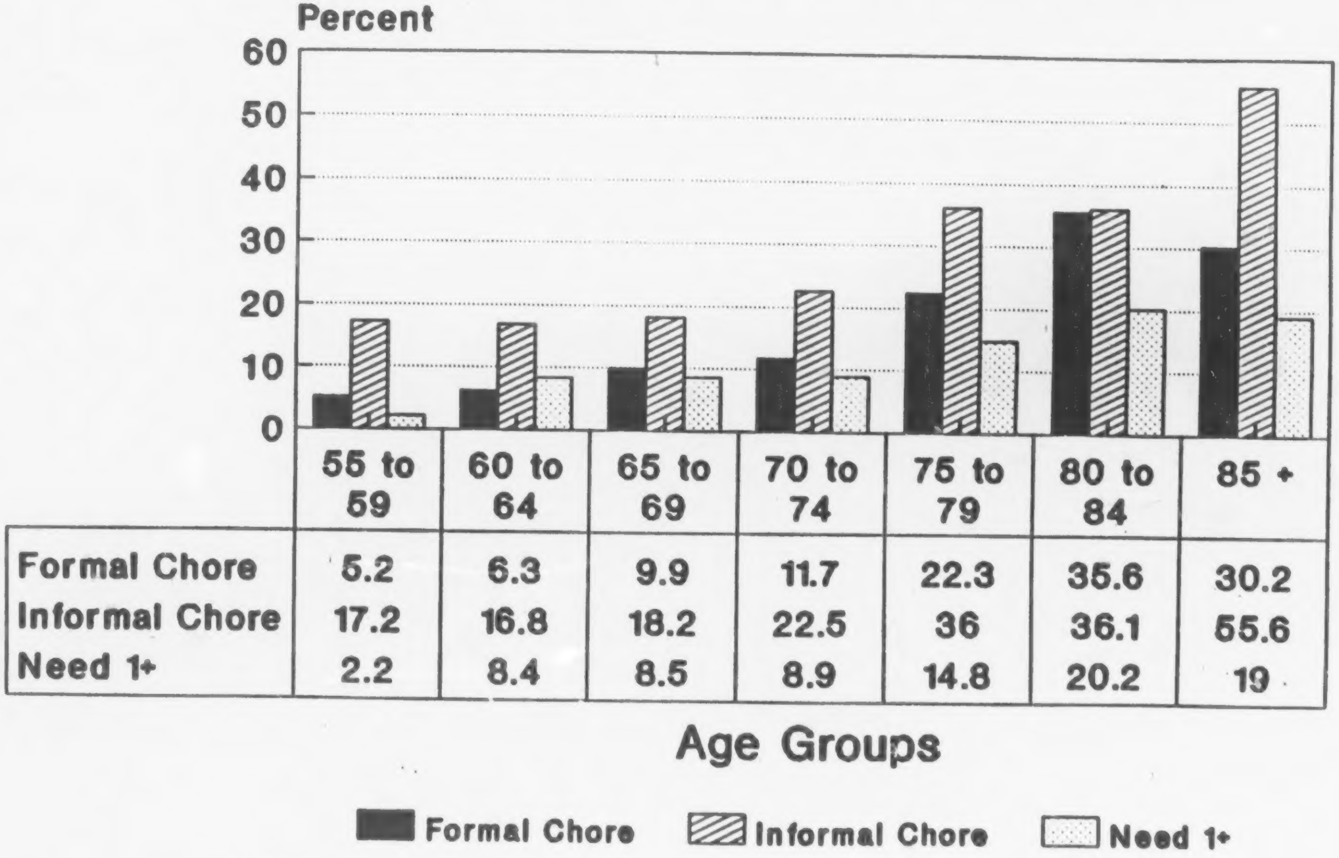
Fifteen percent of the sample 55 and over utilized at least one formal chore service in their home. The range is from a low of 5.2% among the youngest cohort to a high of 35.6% and 30.2% respectively among the two oldest cohorts. More than one quarter of the sample receive at least one type of informal assistance for low-tech services with 55.6% of those elders 85 and older reporting informal assistance for at least one of the chores. Almost 11% indicate a difficulty for which no help is received. This problem ranges from a low of 2.2% among the youngest cohort members to 19% among the oldest (Figure 4-32).

Almost one-third of the individuals living alone rely upon at least one formal chore service, 30.8%, with individuals living in extended households least likely to access the formal sector. Almost 40% of those elders living alone receive informal assistance as do 31.7% of those elders living in extended households. Unmet needs for chore services is highest among elders living alone, 16.6%, and lowest among elders living in households of three or more (Figure 4-33).

Again reflecting the higher prevalence of IADL difficulties among the lower income respondents, use of formal chore services is greater among this group than among the highest income group. The difference, although statistically significant, is not as great for formal

Figure 4 - 32

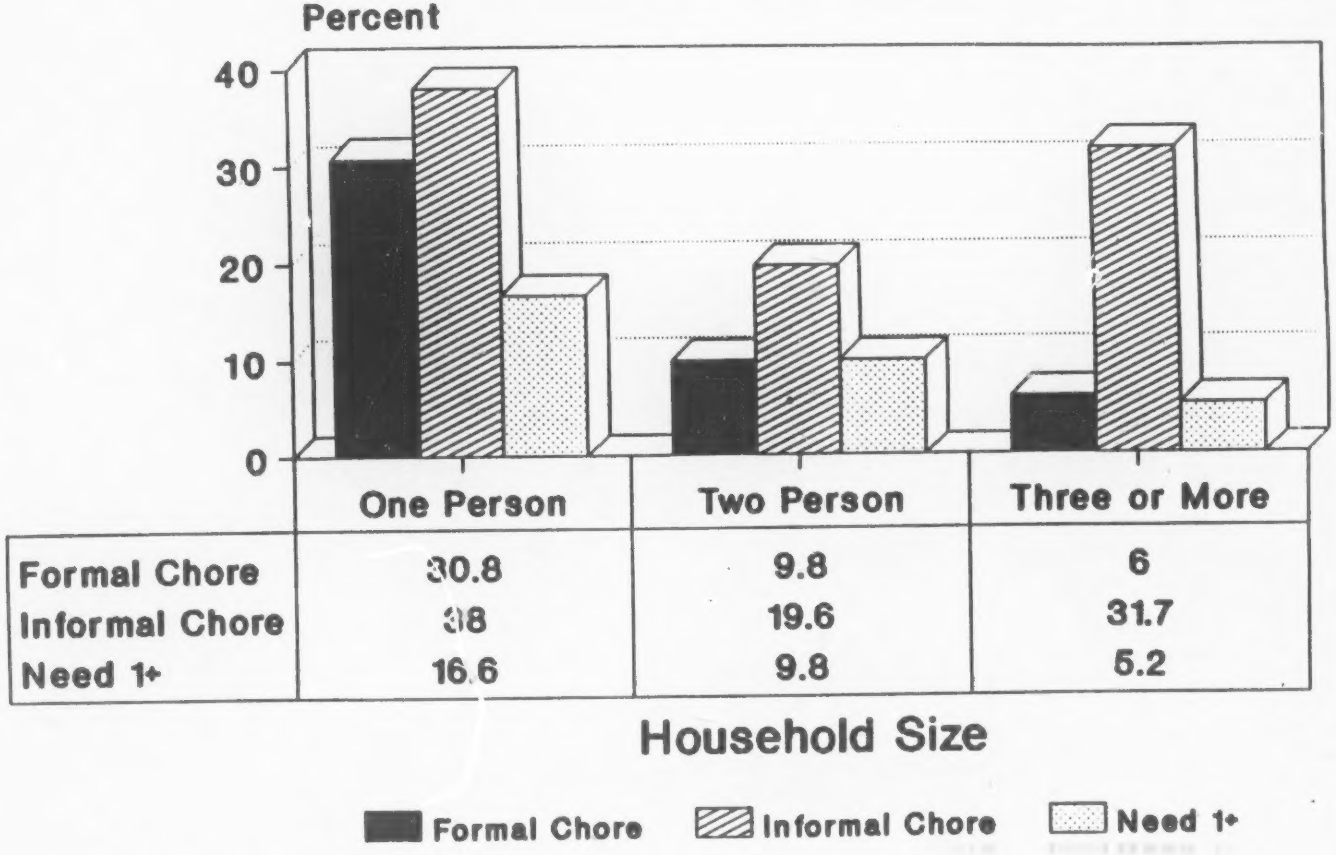
Use of Formal and Informal In-Home Chore Service and Need by Age Groupings *



	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 +
Formal Chore	5.2	6.3	9.9	11.7	22.3	35.6	30.2
Informal Chore	17.2	16.8	18.2	22.5	36	36.1	55.6
Need 1+	2.2	8.4	8.5	8.9	14.8	20.2	19

Statistically Significant Differences

Use of Formal and Informal In-Home Chore Services and Need by Household Size*



	One Person	Two Person	Three or More
Formal Chore	30.8	9.8	6
Informal Chore	38	19.6	31.7
Need 1+	16.6	9.8	5.2

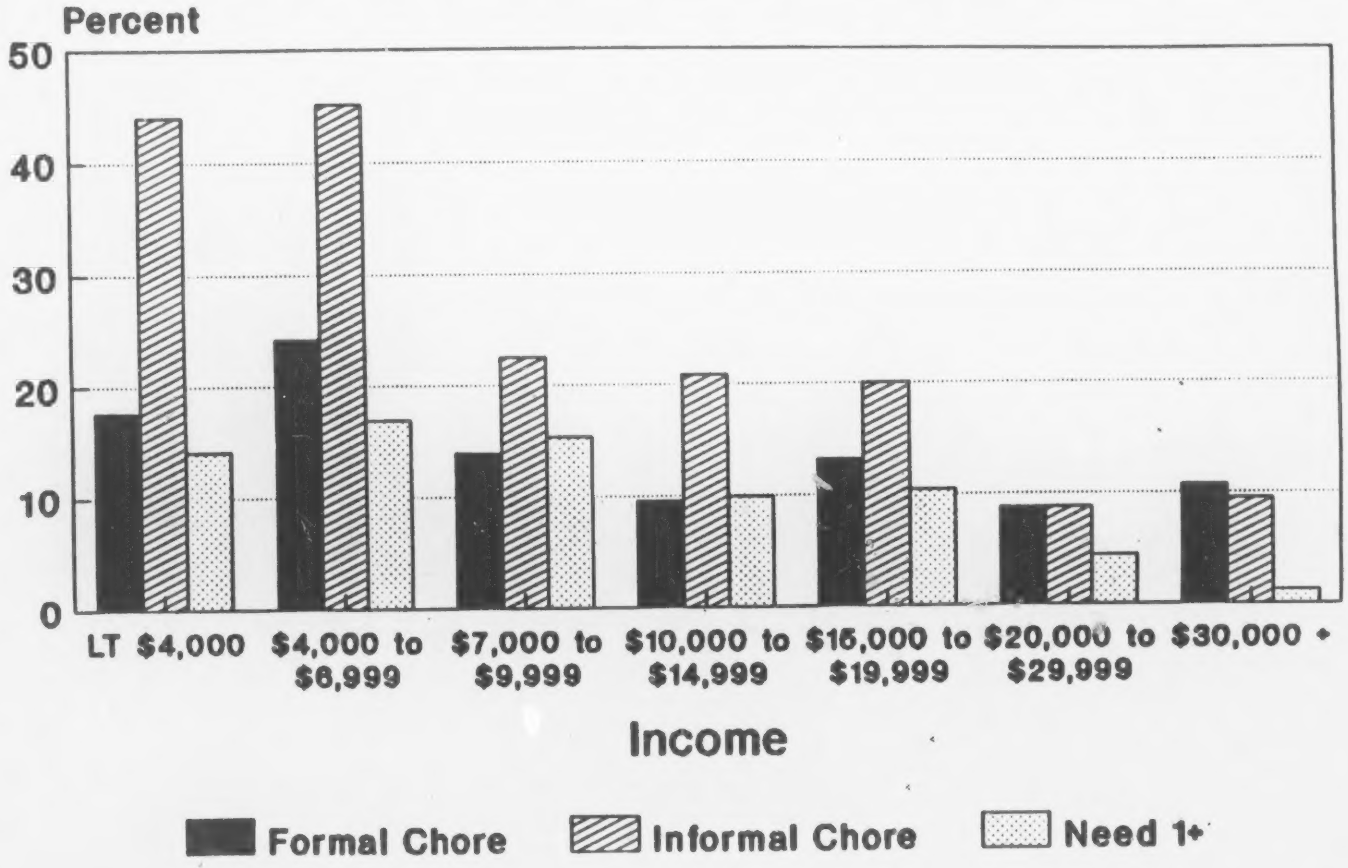
*Statistically Significant Differences

services as that found for informal use or levels of unmet need. The lowest income group reports formal chore service utilization at 17.7%, and among the highest income group utilization is reported by 10.7%. More than two-fifths, 44%, of the lowest income group report informal chore service assistance, but less than 10% of the highest income group receive informal assistance. Levels of unmet need for chore services range from 14.2%, 16.9% and 15.4% for the three lowest income categories to a low of 1.2% among the highest income level respondents (Figure 4-34).

The rates of formal chore service utilization among females is double that of males. Reliance upon informal assistance is also substantially greater for females than males, and levels of unmet need approach 13% for females and 7% for males (Figure 4-35). Although minority elders utilize significantly more formal chore services than whites, the differences are not as great as those noted for informal service utilization and for unmet need. Over one-third of the minority elders, 36.3%, report use of one or more informal chore services compared with less than one-quarter, 23.9%, of the whites. Unmet need for chore service for minorities, 18.3%, is double that of the white respondents, 9.6% (Figure 4-36).

Utilization of formal services is 21.1% for Medicaid recipients and 14.2% for non-recipients. Reliance upon informal assistance is 41.6% for Medicaid recipients and 22.7% for non-recipients. Levels of unmet need are

Use of Formal and Informal In-Home Chore Service and Need by Income*



*Statistically Significant Difference

Figure 4 - 35

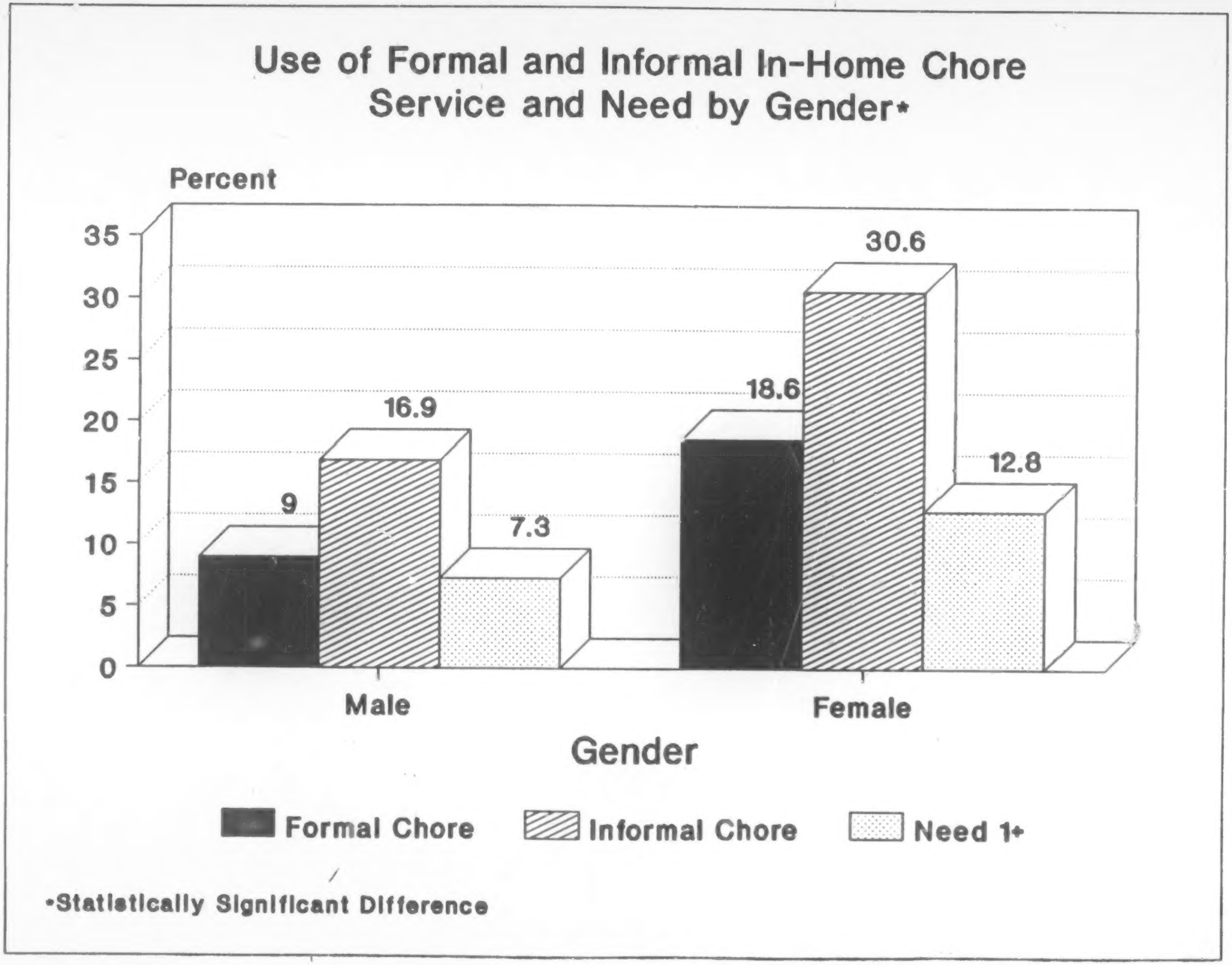
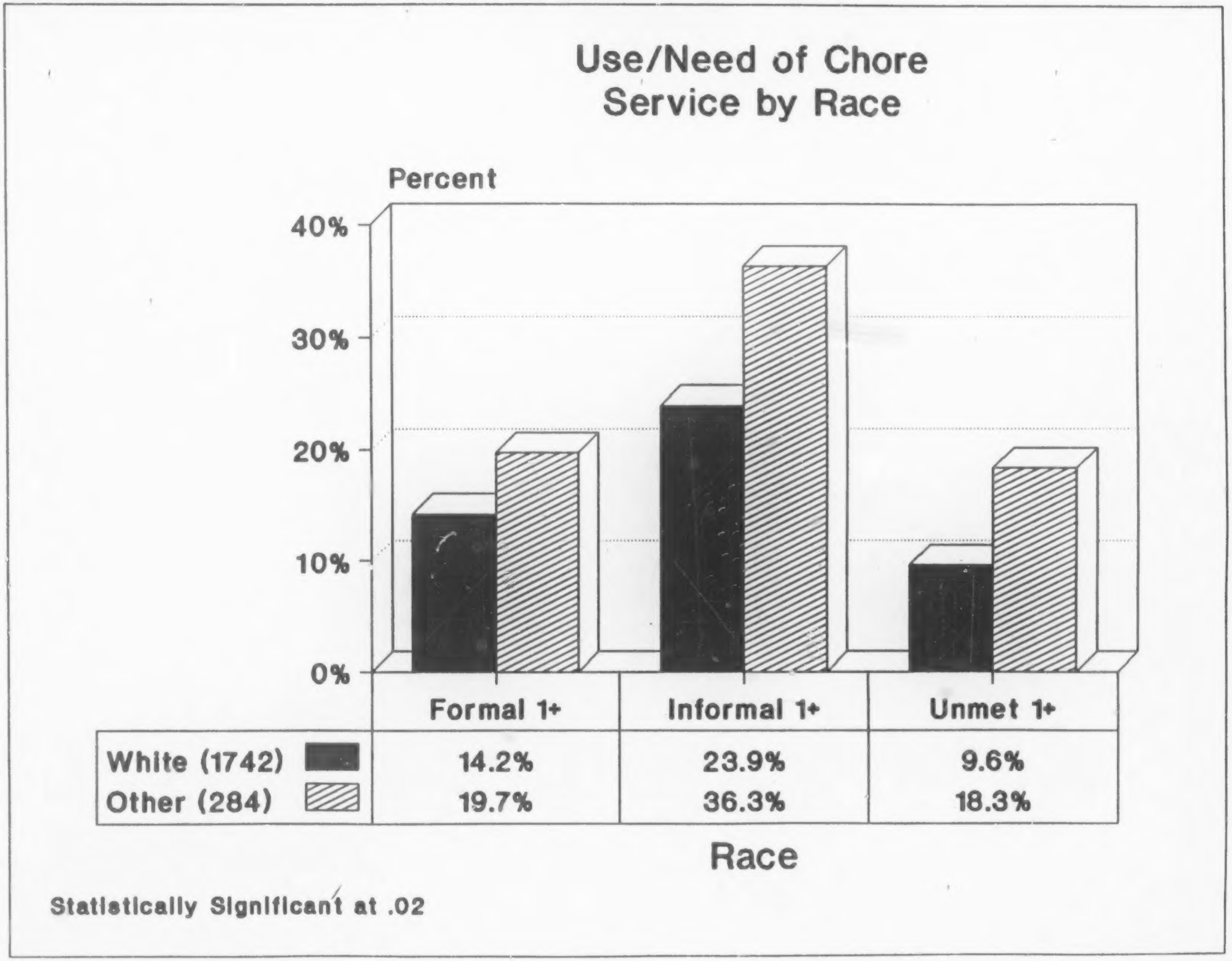

Use of Formal and Informal In-Home Chore Service and Need by Gender*
Percent
35
30
25
20
15
10
5
0
9
16.9
7.3
18.6
30.6
12.8
Male
Female
Gender
Formal Chore
Informal Chore
Need 1+
*Statistically Significant Difference

Figure 4 - 36


Use/Need of Chore
Service by Race
Percent
40%
30%
20%
10%
0%
Formal 1+
Informal 1+
Unmet 1+
White (1742)
Other (284)
14.2%
23.9%
9.6%
19.7%
36.3%
18.3%
Race
Statistically Significant at .02

significantly different although the actual numbers are 15.3% for recipients and 10% for non-recipients. The statistical relationship, although significant, is weaker for this particular measure (Figure 4-37).

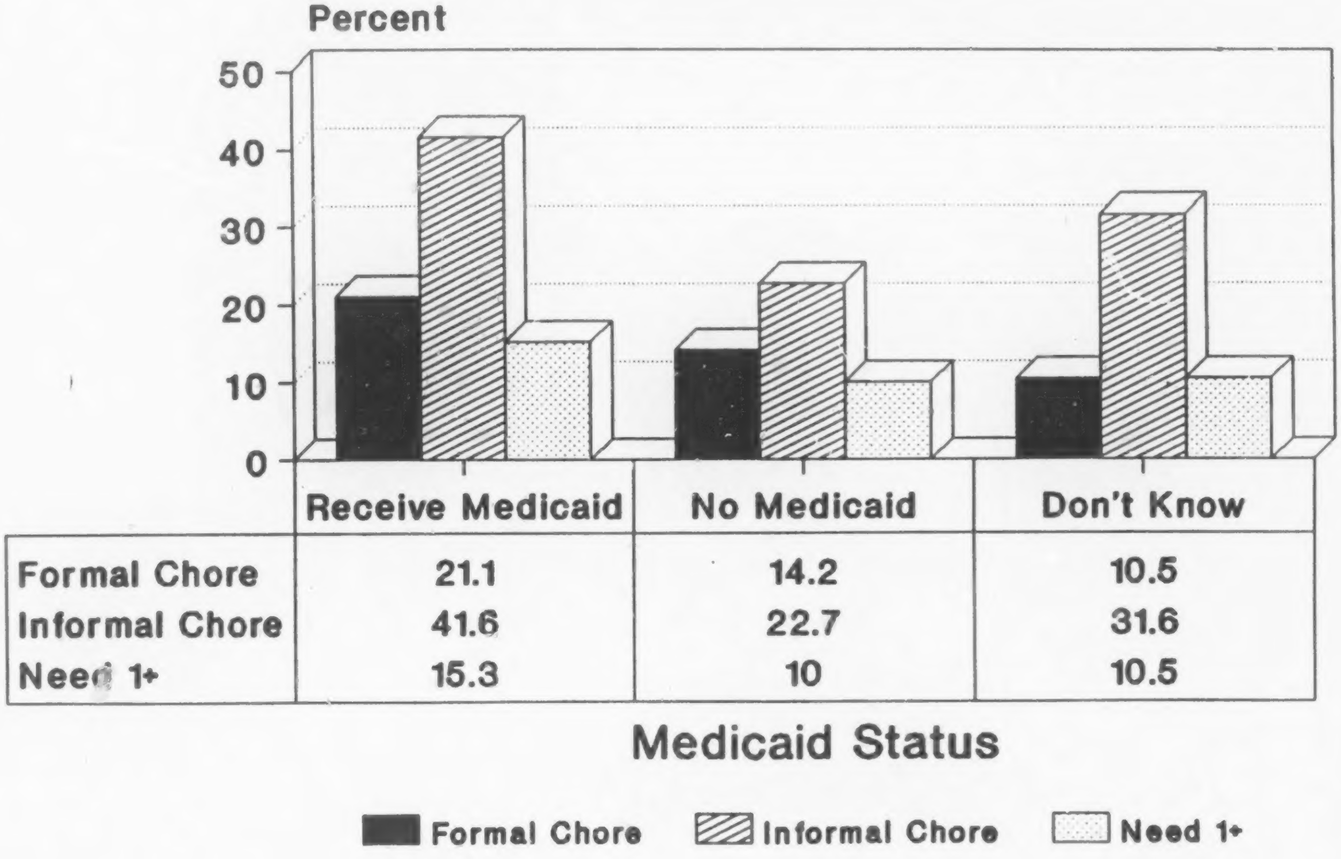
Use of formal chore services does not vary substantially for individuals with insurance supported by public sources and those with all private or a mix of sources. However, less than 4% of the individuals with no insurance coverage report utilization of formal chore services while 18.9% of individuals with public sources use formal chores services. Reliance upon informal services among the individuals with public sources is almost four times greater than that of individuals with private sources, 42.2% and 11.1% respectively. Unmet need is highest among those reporting public resources only, 16.2%, although 11.1% of the individuals with a mix of coverage also report unmet needs (Figure 4-38).

4.4.3 Services Delivered Outside the Home or Formal Institutional Setting

In addition to the in-home services, both high- and low- tech, a major source of support to elders in remaining independent in their own homes involves services provided in the community. These include many of the services most closely linked with the Older Americans' Act such as nutritional programs, transportation, and support services such as counseling, day care, respite care, educational services and legal assistance. In the Arkansas Longitudinal

Figure 4 - 37

Use of Formal and Informal Chore Service and Need by Medicaid Status*

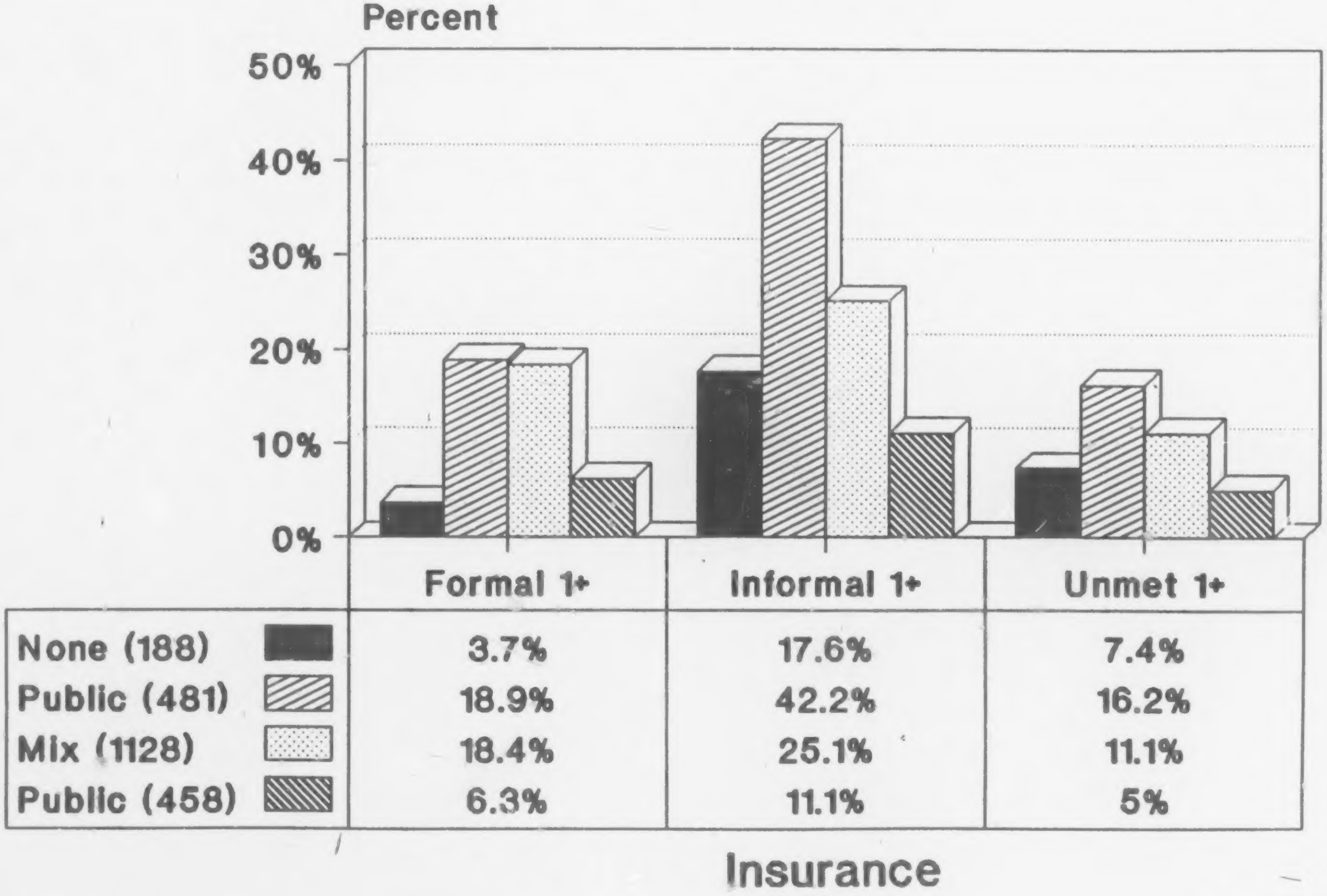


	Receive Medicaid	No Medicaid	Don't Know
Formal Chore	21.1	14.2	10.5
Informal Chore	41.6	22.7	31.6
Need 1+	15.3	10	10.5

*Statistically Significant Difference

Figure 4 - 38

Use/Need of Chore Service
By Insurance



	Formal 1+	Informal 1+	Unmet 1+
None (188) ■	3.7%	17.6%	7.4%
Public (481) ▨	18.9%	42.2%	16.2%
Mix (1128) ░	18.4%	25.1%	11.1%
Public (458) ▧	6.3%	11.1%	5%

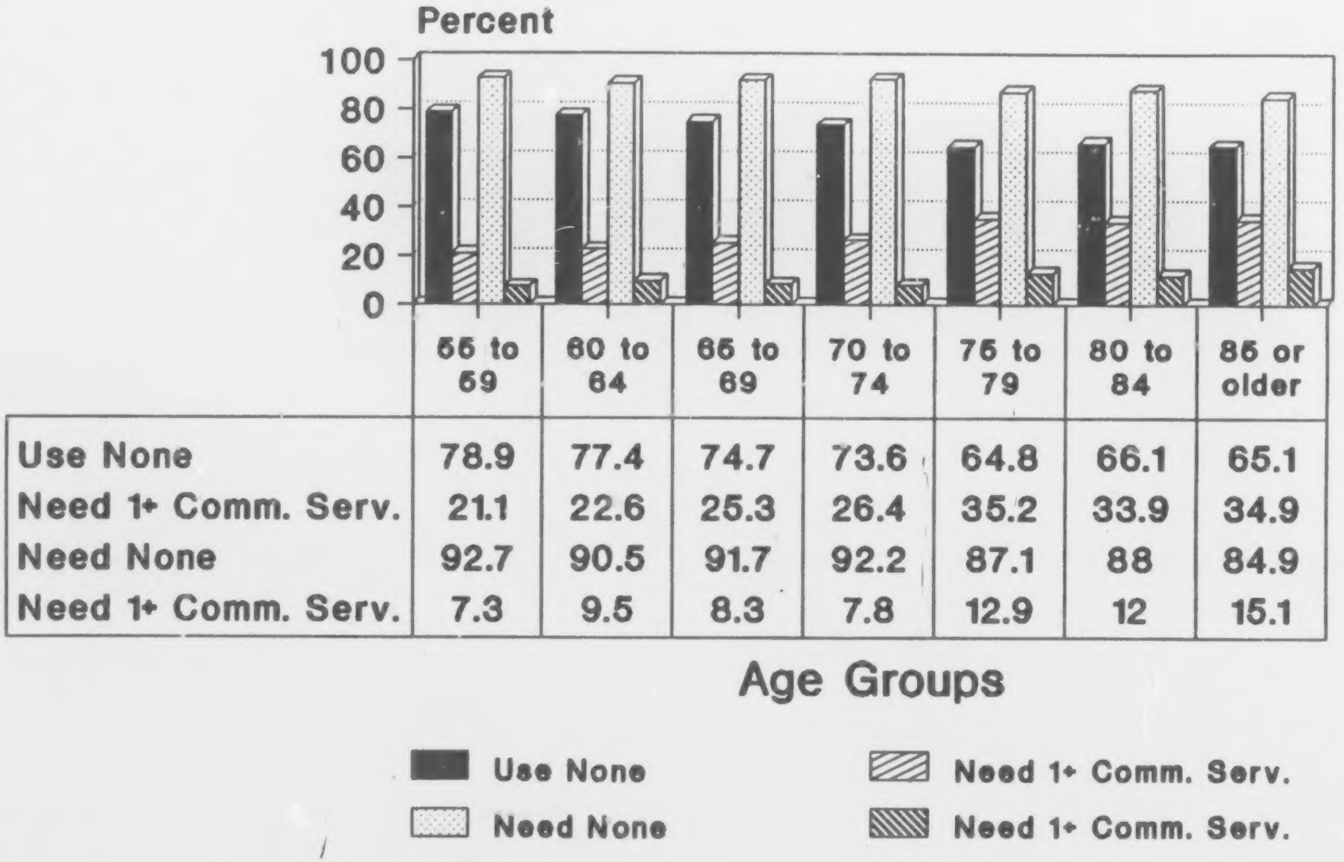
Statistically Significant at .0001

Study, no attempt was made to link the use of services or perception of need for services directly to an ADL or IADL impairment as was done for the in-home health and chore services. Project staff worked closely with Arkansas aging specialists to devise a set of probes which would be easily understood by the non-professional and would identify individuals who were users of services or who might need such a service. Among the respondents in this wave of research, more than 27% report using one or more of the services included in the probes. Although older respondents do report higher levels of utilization, 34.9%, more than one-fifth of the youngest cohort also reports utilization. The content of participation differs somewhat for the different age groups. Just under 10% report that they need but do not receive one or more of the services. Unmet need is highest among the oldest respondents, 15.1%, and lowest among the under 60 group, 7.3% (Figure 4-39).

Elders who live alone are the highest users of community services with almost two-fifths, 38.3%, reporting utilization. More than a quarter of the two person households report use of one or more services, and individuals in larger households are less involved in the community service structure. Elders living alone also report the highest levels of unmet need, 12.5%, but elders in households of three or more are only slightly less needy of services, 11.2% (Figure 4-40).

Figure 4 - 39

Use of and Perceptions of Need for Services Located in the Community by Age

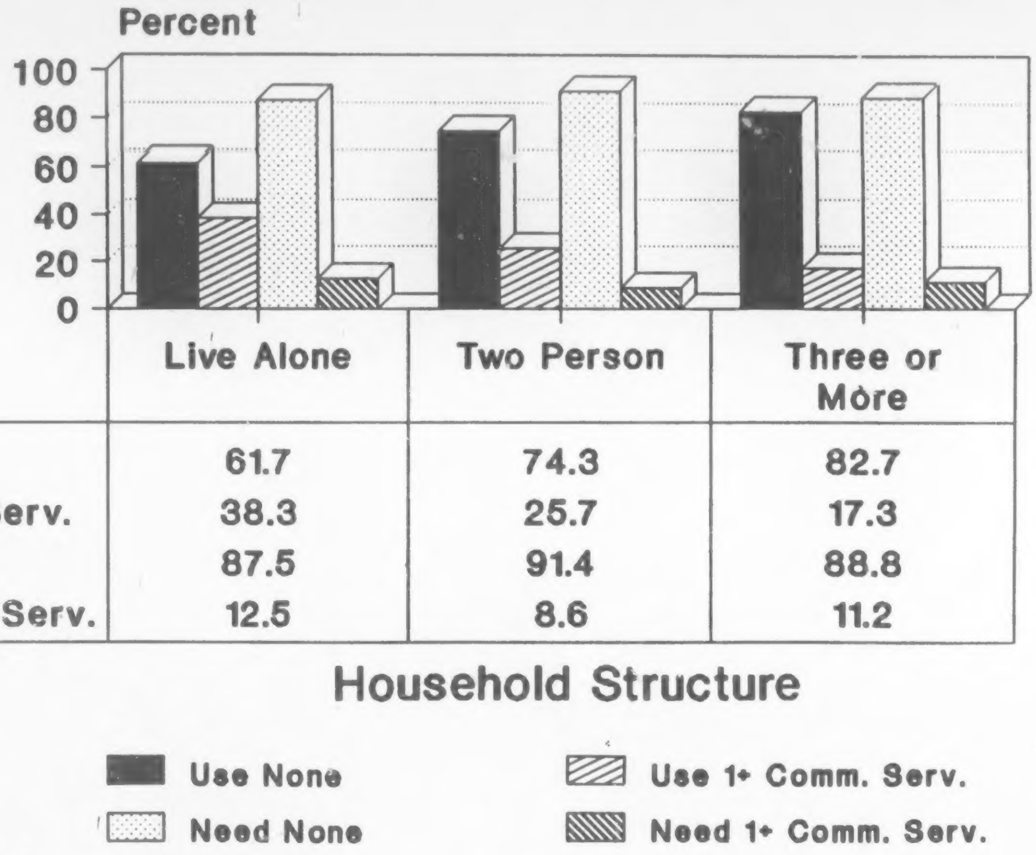


	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 or older
Use None	78.9	77.4	74.7	73.6	64.8	66.1	65.1
Need 1+ Comm. Serv.	21.1	22.6	25.3	26.4	35.2	33.9	34.9
Need None	92.7	90.5	91.7	92.2	87.1	88	84.9
Need 1+ Comm. Serv.	7.3	9.5	8.3	7.8	12.9	12	15.1

P=<.03

Figure 4 - 40

Use of and Perceptions of Need for Community Services by Household Size



	Live Alone	Two Person	Three or Mòre
Use None	61.7	74.3	82.7
Use 1+ Comm. Serv.	38.3	25.7	17.3
Need None	87.5	91.4	88.8
Need 1+ Comm. Serv.	12.5	8.6	11.2

P=<.02

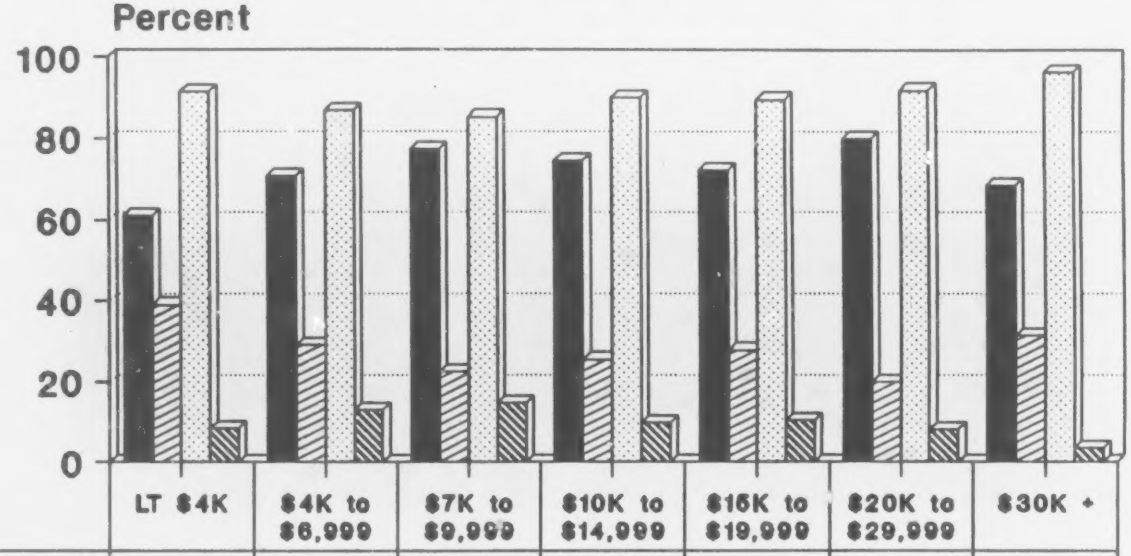
Utilization rates also vary significantly by income, but the relationship is not linear. Individual in the lowest income category are most likely to use these services, 39%, but the second highest usage category is the highest income group with 31.4% reporting involvement with one or more services. Perceptions of unmet need do not follow a linear pattern. Individuals who receive between $4,000 and $9,999 report the greatest need for services. The highest income group does report the lowest level of unmet need for these types of services (Figure 4-41).

Women report the highest rates of utilization for these types of services and the highest level of unmet need (Figure 4-42). Both utilization patterns and perceptions of need do vary by region. Regions I and V report the highest utilization rates, and the highest rates of perceptions of need are found in Regions III and VI (Figure 4-43). Neither utilization nor unmet need differ by racial category (Figure 4-44).

Medicaid recipients are significantly more likely to report utilization of one or more services, 34.1% compared to 26.8% among non-Medicaid recipients, but they are not more likely to report perceptions of need. Individuals with no insurance coverage report the lowest utilization rates for these types of services, but all categories of coverage report fairly similar patterns in their rates of utilization. Individuals who report only public sources of

Figure 4 - 41

Use of and Perceptions of Need for Community Services by Income



	LT $4K	$4K to $6,999	$7K to $9,999	$10K to $14,999	$15K to $19,999	$20K to $29,999	$30K +
Use None	61	70.9	77.5	74.5	72.2	80.1	68.6
Use 1+ Comm. Serv.	39	29.1	22.5	25.5	27.8	19.9	31.4
Need None	91.5	87	85.3	90.1	89.6	91.9	96.4
Need 1+ Comm. Serv.	8.5	13	14.7	9.9	10.4	8.1	3.6

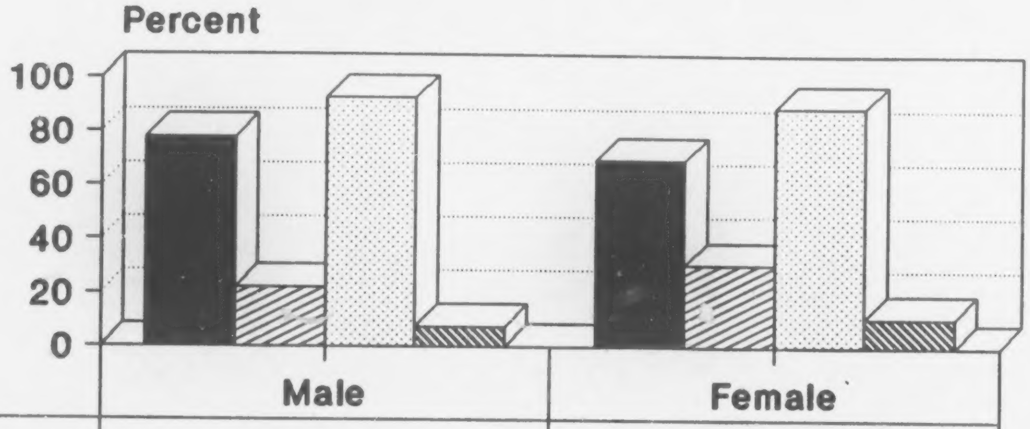
Income

- ■ Use None
- ░ Need None
- ▨ Use 1+ Comm. Serv.
- ▧ Need 1+ Comm. Serv.

P=<.006

Figure 4 - 42

Use of and Perceptions of Need for Community Services by Gender



	Male	Female
Use None	77.9	69.5
Use 1+ Comm. Serv.	22.1	30.5
Need None	92.5	89.1
Need 1+ Comm. Serv.	7.5	10.9

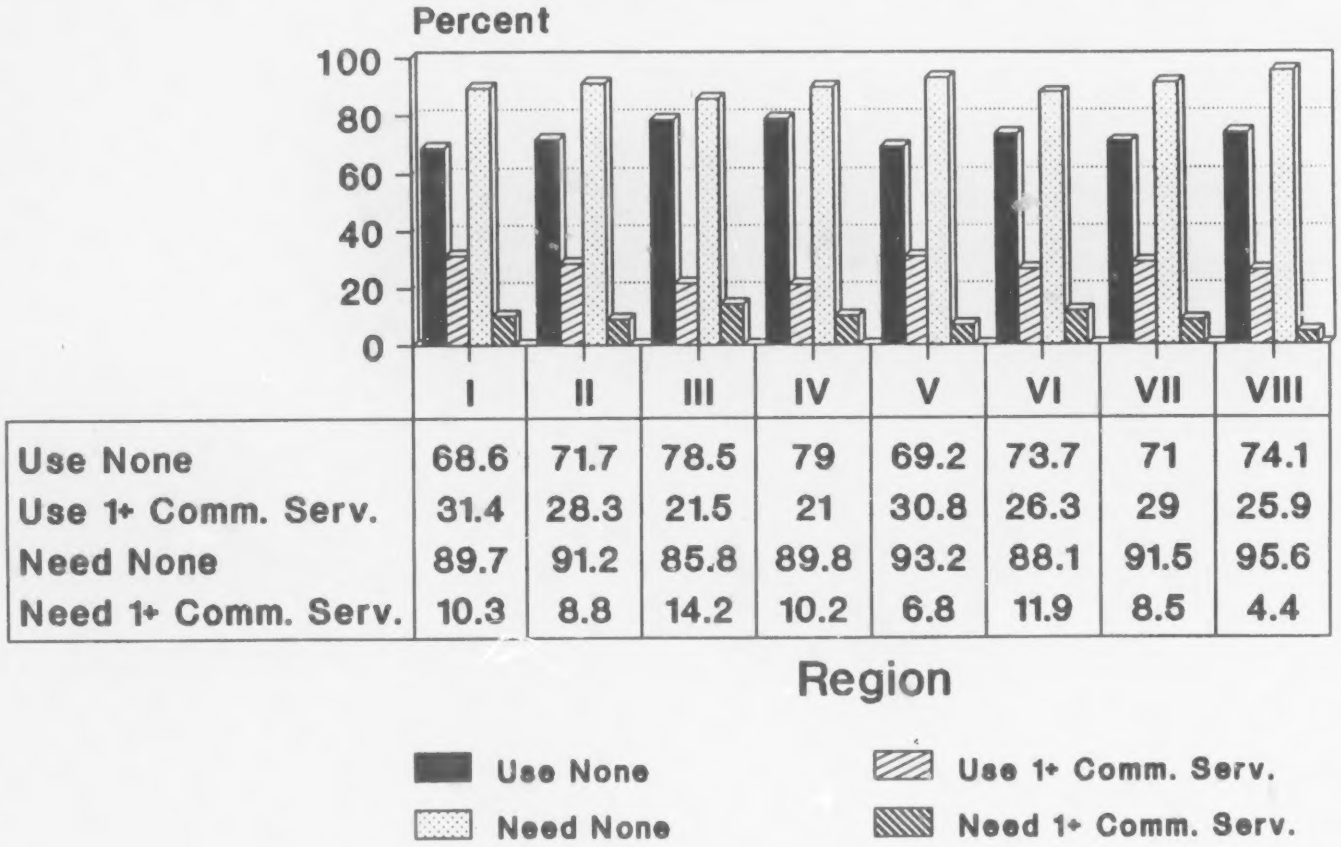
Gender

■ Use None
▨ Use 1+ Comm. Serv.
░ Need None
▧ Need 1+ Comm. Serv.

P=<.009

Figure 4 - 43

Use of and Perceptions of Need for Community Services by Region



	I	II	III	IV	V	VI	VII	VIII
Use None	68.6	71.7	78.5	79	69.2	73.7	71	74.1
Use 1+ Comm. Serv.	31.4	28.3	21.5	21	30.8	26.3	29	25.9
Need None	89.7	91.2	85.8	89.8	93.2	88.1	91.5	95.6
Need 1+ Comm. Serv.	10.3	8.8	14.2	10.2	6.8	11.9	8.5	4.4

P=<02

Figure 4 - 44

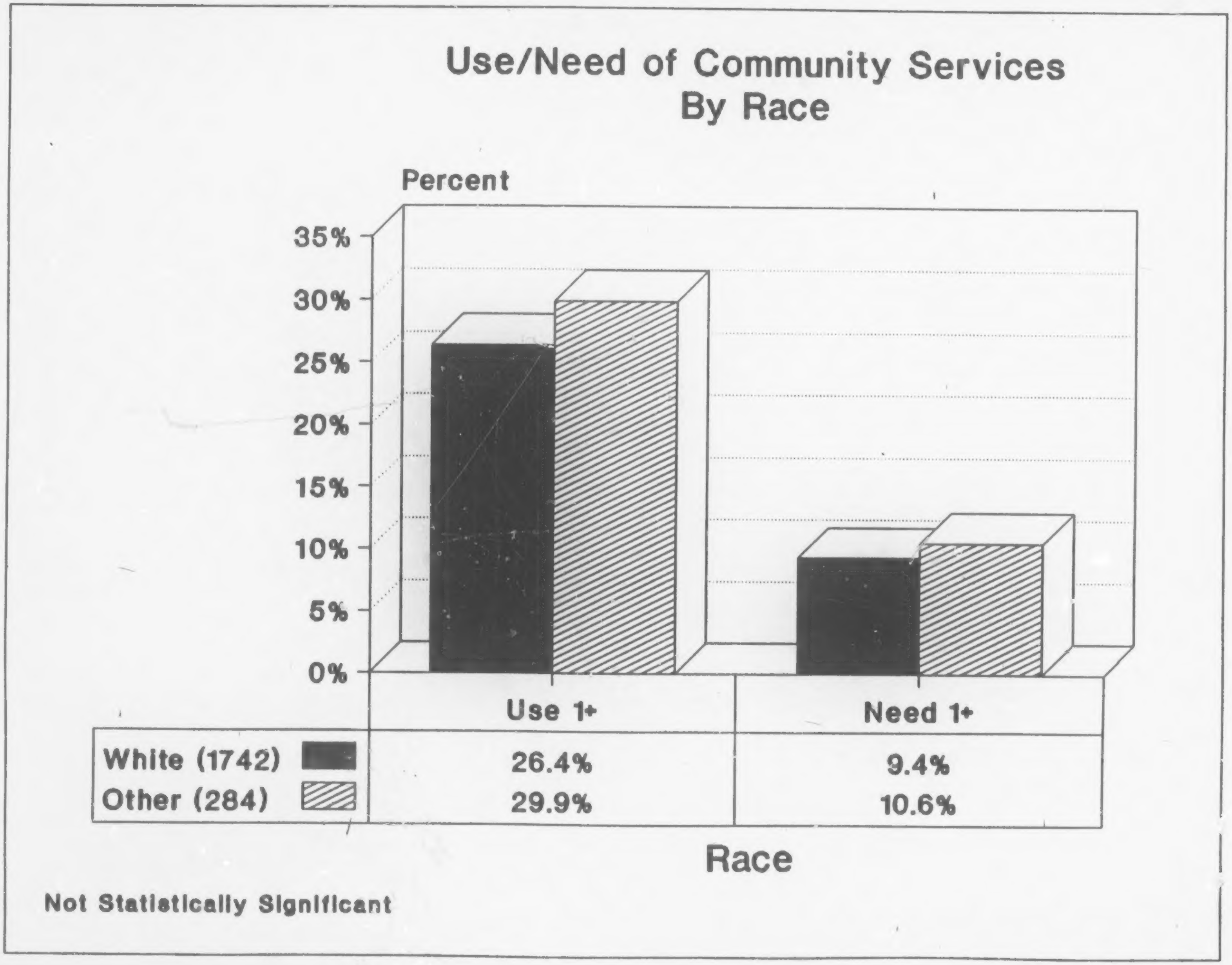
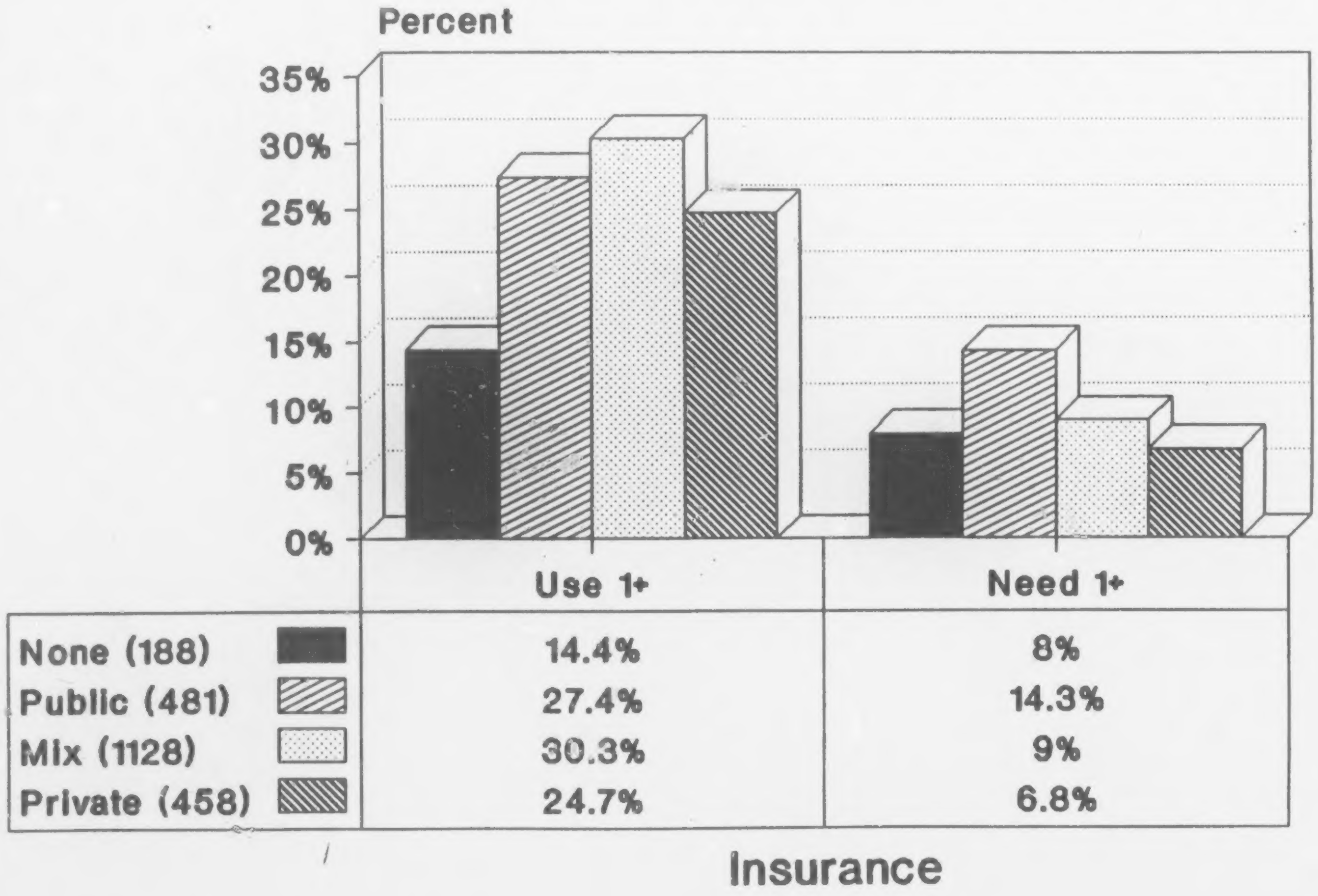

Use/Need of Community Services
By Race
Percent
35%
30%
25%
20%
15%
10%
5%
0%
Use 1+
Need 1+
White (1742)
26.4%
9.4%
Other (284)
29.9%
10.6%
Race
Not Statistically Significant

Figure 4 - 45

Use/Need Community Services By Insurance



	Use 1+	Need 1+
None (188) ■	14.4%	8%
Public (481) ▨	27.4%	14.3%
Mix (1128) ░	30.3%	9%
Private (458) ▧	24.7%	6.8%

Statistically Significant at .0001

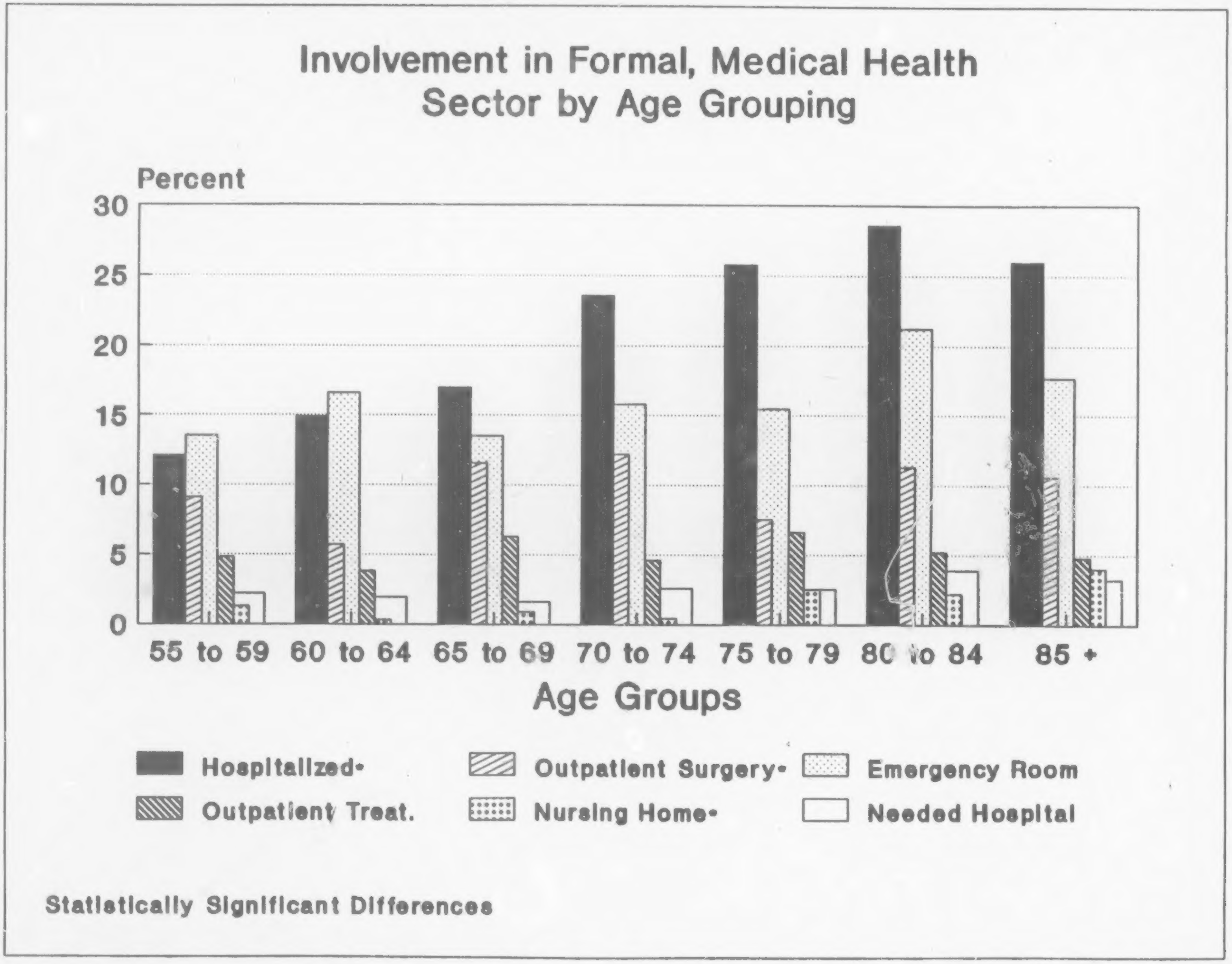
insurance report the highest levels of unmet need among the categories (Figure 4-45).

4.4.4 Formal Hospital/Institutional Service Involvement

One of the major motivating factors for performing the Arkansas Longitudinal Study on Health and Aging was the introduction of the Prospective Payment System as a form of reimbursement for hospital stays. This policy, introduced in 1983, has had profound effect on the home and community-based care system throughout the country. Although many services which were once considered the domain of a formal hospital service structure are now produced and consumed in the home or at some other location, the formal hospital setting or an institutional setting still remain an important source for the introduction of many elders into the service system. In the Arkansas study, a scale of involvement with the formal hospital or institutional structure was devised through analyses of five probes on the Wave II questionnaire. Respondents were asked whether 1)any individual 55 or older had been hospitalized since the Wave I interview, 2)if any of the elders had required outpatient surgery since the original interview, 3)if services of a hospital emergency room or a neighborhood emergency center had been required, 4) if any elders required regular outpatient treatments such as dialysis, radiation or physical therapy since the original interview, and 5)if any elder had been admitted to a nursing home for any period of time since the first interview. Slightly more than one-fifth, 20.7%, of the sample had been hospitalized, 9.7% report outpatient surgery, 15.9% report emergency room use, 5.2% report outpatient treatment or therapy, and 1.3% have been admitted to a nursing home. Age impacts hospitalization with each cohort increasing successively until the 85 or older where hospitalization decreases slightly (Figure 4-46). Income also impacts hospitalization patterns with the lowest income group least likely to be hospitalized. The relationship of hospitalization to income, although significant, is not linear. Rates are lowest at each end of the income continuum. No differences are noted among regions or by household size or sex (Table 4-3).

Outpatient surgery differs by age groups but the relationship is not linear. Single person households have a higher rate of outpatient surgery than either two person or three or more person households. Males are more likely to report outpatient surgery, and differences are noted among regions where Region VII reports the highest rate, and Region I reports the lowest (Figure 4-47). Age does not impact use of emergency room services nor does gender. Single person households are the highest utilizers of this formal service with households of three or more almost as high. Lowest income groups are more likely to report emergency room experience than are upper income respondents, and regional variations are significant. Highest levels of

Figure 4 - 46



Involvement in Formal, Medical Health Sector by Age Grouping

Statistically Significant Differences

TABLE 4-3

FORMAL HOSPITAL/INSTITUTIONAL SERVICE INVOLVEMENT IN ARKANSAS

FORMAL/INSTITUTIONAL SERVICES

	NONE (64.9%)	ONE (21.7%)	TWO (10.3%)	THREE OR MORE (3.2%)
AGE				
50 to 59	71.1	20.7	5.2	$3.0^{.005}$
60 to 64	71.5	18.5	7.6	2.4
65 to 69	68.6	17.9	10.5	2.9
70 to 74	61.9	24.2	10.4	3.5
75 to 79	61.0	24.2	11.5	3.3
80 to 84	54.0	27.0	14.2	3.9
85 to older	61.1	19.8	15.1	4.0
HOUSEHOLD SIZE				
One	59.4	25.3	11.1	$4.2^{.01}$
Two	68.1	20.1	9.3	2.5
Three or More	61.8	21.7	12.9	3.6
INCOME				
LT $4,000	77.3	12.1	7.8	$2.8^{.0001}$
$4,000-$6,999	57.4	23.1	15.1	4.4
$7,000-$9,999	66.0	23.9	7.0	3.2
$10,000-$14,000	63.1	18.1	13.1	5.7
$15,000-$19,999	70.1	16.7	11.8	1.4
$20,000-$29,999	61.8	27.9	8.1	2.2
$30,000-or More	70.4	21.9	4.7	3.0
SEX				
Male	64.2	22.0	10.1	$3.7^{.52}$
Female	66.0	21.2	10.1	2.7
Rural Location				
Most Urban (4-8)	63.0	22.0	13.0	$2.0^{.17}$
9 thru 13	64.1	21.8	11.5	2.5
14 thru 15	69.1	20.3	7.4	3.2
16	66.7	20.5	8.6	4.2
17 (most rural)	69.9	20.2	7.7	2.1

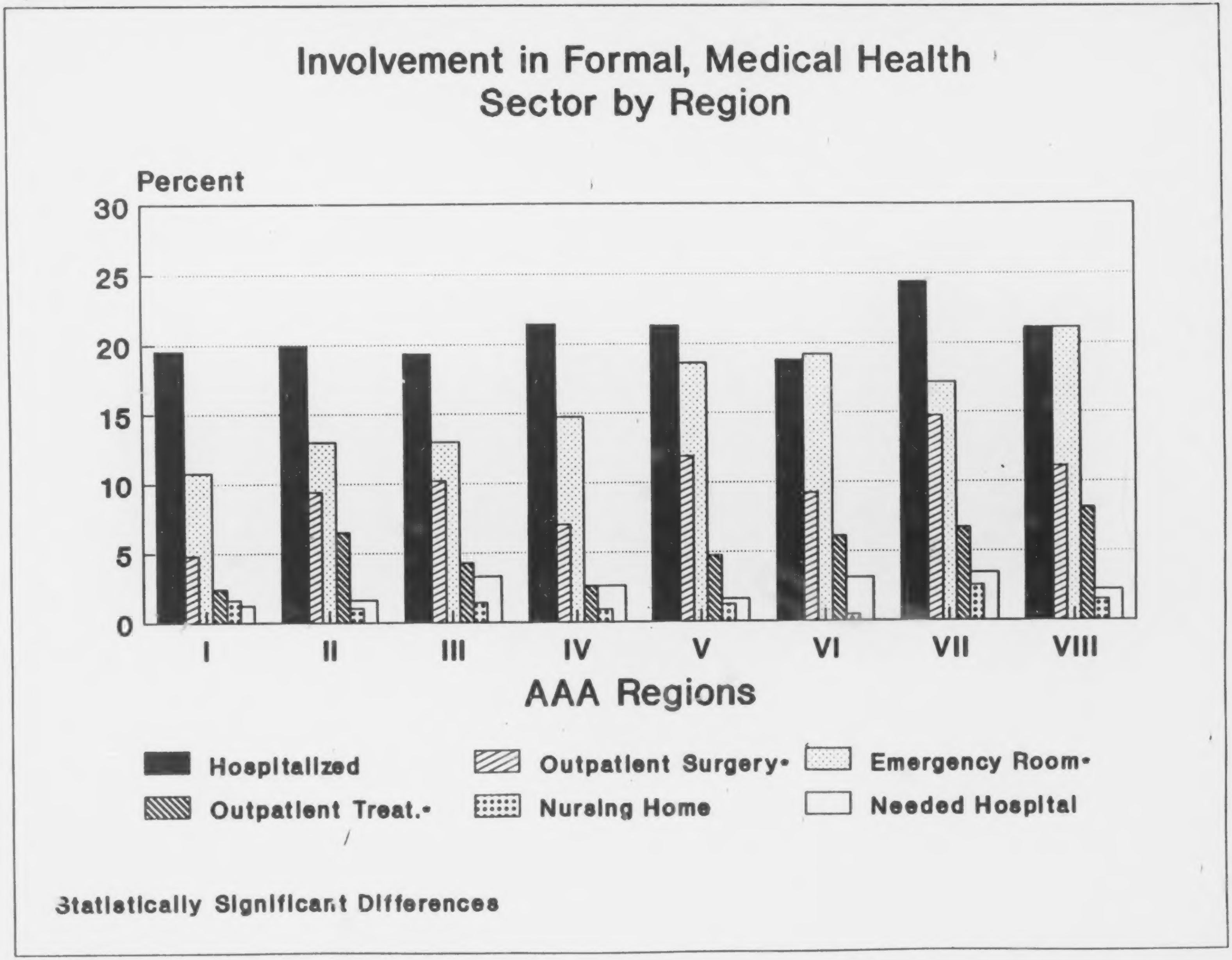
TABLE 4-3 (cont.)

FORMAL HOSPITAL/INSTITUTIONAL SERVICE INVOLVEMENT IN ARKANSAS

FORMAL/INSTITUTIONAL SERVICES

	NONE (64.9%)	ONE (21.7%)	TWO (10.3%)	THREE OR MORE (3.2%)
Insurance				
No Insurance	85.8	8.4	3.8	$1.9^{.0001}$
Public Only	59.6	23.8	3.8	3.3
Mix Public & Private	62.3	22.9	11.1	3.8
Private Only	72.9	19.2	6.3	1.5
Medicaid				
Yes	61.4	20.8	13.6	$4.2^{.18}$
No	65.2	22.0	9.8	3.0
Don't Know	78.9	21.1	--	--
ADL Total				
None	71.7	18.0	8.1	$2.2^{.0001}$
One	50.0	35.1	12.9	2.0
Two	45.8	30.2	15.6	8.3
Three or more	27.5	27.5	28.4	16.7
IADL Total				
None	74.2	17.9	6.0	$1.9^{.0001}$
One	62.1	21.9	12.8	3.2
Two	54.8	25.9	14.5	4.8
Three or more	41.7	29.8	21.3	7.2

Figure 4 - 47


Involvement in Formal, Medical Health Sector by Region
Percent
30
25
20
15
10
5
0
I
II
III
IV
V
VI
VII
VIII
AAA Regions
Hospitalized
Outpatient Surgery*
Emergency Room*
Outpatient Treat.*
Nursing Home
Needed Hospital
*Statistically Significant Differences

utilization are noted in Region VIII, 21.1%, and lowest are in Region I, 10.8%. Outpatient therapy varies only by region. Region VIII again is highest, 8.1%. and Region I, the lowest, 2.4%. Nursing home experiences vary only by age category with increasing utilization by increasingly elderly cohorts.

Almost 65% of the elders had no interaction with the formal hospital or nursing home environment since the first interview. More than 21% had been involved with at least one service, 10.3% with two and 3.2% with three or more of the services named. The use of two kinds of services does increase in a linear fashion with age, but the percent of individual using three or more services ranges from 2.4% among the 60 to 64 group to 4% among the 85 or older. Individuals living alone are more likely to be multiple service users than are individuals in other household configurations (Table 4-3). Income affects multiple service usage, but not in a linear fashion. The lowest income group is least likely to be involved in any service at all followed closely by the individuals earning $30,000 or more. Individuals with public sources of insurance coverage are the most likely users of multiple services, but access to Medicaid does not impact utilization. Utilization of multiple services is highest among elders with three or more ADLs, 16.7%, and/or with three or more IADLs, 7.2% (Table 4-3).

4.4.5 Social Activity

The maintenance of involvement in activities which require interaction with others is measured by a scale of social activity. The level of participation for each single variable is presented in the technical tables. These single queries (excluding reading or watching TV) were combined and an average score of activity involvement calculated.

For the sample as a whole, the average number of activities reported for any elder is 2.28 (Table 4-4). Maximum possible score is five. Age significantly and negatively affects mean activity level, but the relationship is not perfectly linear. Average number of activities increases in each cohort until age 75 when activity level declines well below the sample's average (Table 4-4). Activity increases with each income level. Women report more activities than men and whites more than non-whites. Individuals living alone and those in two person households have virtually identical activity averages. ADL and IADL impairment negatively impact activity level as would be expected. Although significantly different means are obtained by region, in practical terms the differences are not substantive. Region II reports the lowest mean and Region V the highest.

4.4.6 Economic Vulnerability

Economic vulnerability is a measure of low income OR no insurance, unemployed for health or caregiving reasons, OR not enough money to get by on each month OR perceptions of being worse off financially now than two years ago. Average

TABLE 4-4

AVERAGE NUMBERS OF SOCIAL ACTIVITIES & ECONOMIC PROBLEMS BY DEMOGRAPHIC CHARACTERISTICS

	Social F Sig X 2.28			Ecoprob F Sig X 1.82		
	X	F	Sig	X	F	Sig
Age						
55 to 59	2.30	11.29	.0001	1.04	35.46	.0001
60 to 64	2.35			1.40		
65 to 69	2.40			1.86		
70 to 74	2.45			1.92		
75 to 79	2.25			2.20		
80 to 84	1.98			2.24		
85+	1.56	(R = -.11; R^2 = .08)		2.14	(R = .25; R^2 = .07)	
Income						
LT 4K	1.98	24.09	.0001			
4 to 6999	1.92					
7 to 9999	1.96					
10 to 14999	2.33					
15 to 15999	2.55					
20 to 29999	2.80					
30+	2.90	(R = .28; R^2 = .08)				
Race						
White	2.28	11.6	.0007	1.68	133.77	.0001
Other	2.00			2.57		
ADL Total						
None	2.38	46.95	.0001	1.66	45.86	.0001
One	1.86			2.41		
Two	1.73			2.47		
Three+	1.13	(R = .24; R^2 = .06)		2.43		
IADL Total						
None	2.40	46.49	.0001	1.53	84.62	.0001
One	2.34			2.01		
Two	2.13			2.31		
Three+	1.49	(R = .23; R^2 = .05)		2.59	(4 = .32; R^2 = .10)	
Gender						
Male	2.12	12.12	.0005	1.66	21.15	.0001
Female	2.32			1.91		

TABLE 4-4 (cont.)

AVERAGE NUMBERS OF SOCIAL ACTIVITIES & ECONOMIC PROBLEMS BY DEMOGRAPHIC CHARACTERISTICS

	Social F Sig X 2.28			Ecoprob F Sig X 1.82		
	X	F	Sig	X	F	Sig
Rural						
4 - 8	2.51	13.31	.0001	1.73	7.32	.0001
9 - 13	2.43			1.65		
14 - 15	2.13			1.88		
16	2.11			2.00		
17	1.93	(R = .15; R^2 = .02)		1.90	(R =.10; R^2 = .0099)	
Region						
I	2.24	2.20	.03	1.86	1.47	.17
II	2.09			1.81		
III	2.13			1.90		
IV	2.31			1.85		
V	2.43			1.77		
VI	2.21			1.85		
VII	2.20			1.86		
VIII	2.35			1.60		

number of difficulties reported by the sample is 1.82. Older respondents average higher scores of vulnerability than do younger sample members. Nonwhites have a larger average number of difficulties than do whites. Individuals living alone are substantially more vulnerable than persons in other household structures. ADL and IADL impairment are positively related with increasing vulnerability as impairment increases. Women are more vulnerable than men. Economic vulnerability is associated with rural characteristics, but differences among regions are not statistically significant.

4.5 Use of and Importance of the Data

The completion of the second wave of analyses from the ALSHA comes at a critical planning time for all state units on aging. Congress has mandated the identification of unmet need for various Older Americans' Act services as well as non-OAA services for elders. Few data bases exist which provide reliable planning information at a specific state or planning area level. The State of Arkansas is one of very few state units or area agency associations which has developed a comprehensive information and planning data system from which reliable estimates of unmet need can be determined to meet the Congressional mandate. Three types of patterns of unmet need have been identified in this report. State level planners can now take the estimates of unmet need for in-home health and personal care services and those for chore services or community services delivered outside the home or institutional setting to identify the number of elders in the state who may be lacking in appropriate services. To understand the need for nutritional services in particular, the technical tables should be consulted to identify individuals who report difficulty cooking or shopping or difficulty feeding self as potential measures of need for congregate or home-delivered meals. Perceptions of need for senior center meals or home delivered meals are also contained in the technical tables section.

Planners are cautioned, however, to remember that all sample surveys have a sampling error. Any finding reported for the State of Arkansas can be interpreted in the following way. Any sample statistic reported actually will be within 3 point plus or minus for the population, 95% of the time. This precaution is an important reminder for planners who will be calculating the need for various services. For example, if this report indicates that 10% of the sample elders report a difficulty or problem, then one can assume that the real figure for the population ranges from 7% to 13%. Further, if we conducted the survey 100 times, the findings would fall within the 7-13% range 95 out of 100 times. For those few services identified in the technical table where no sample member is utilizing the service, but planners are aware of users in their region, the area agency planner is reminded to apply the margin of error rule.

This Wave II report has focused on many variables which were not reported in the first wave of data collection. The measures are more complex and should be more helpful in the planning process than simple, single variable analyses. However, those single variables which were the focus of the Wave I report are reported in the following technical tables section. Planners are encouraged to utilize both kinds of data in their determination of unmet needs. Few other states will have comparable resources to meet the Congressional mandate.

SECTION 5.0

TECHNICAL TABLES

TABLE 5-1

REGIONAL COMPOSITION BY AGE
(ALL ELDERS)

Percentage of Elders in Age Cohort

REGION	55-59	60-64	65-69	70-74	75-79	80-84	85+	N*
Region I	7.3	15.4	23.5	19.4	19.8	9.7	4.9	247
Region I	13.1	17.0	17.9	20.5	16.0	8.7	6.7	312
Region III	9.4	16.7	23.2	20.7	15.2	9.8	5.1	276
Region IV	11.8	17.9	17.9	22.5	13.3	11.0	5.5	346
Region V	7.9	13.1	19.4	17.9	22.2	13.5	6.0	252
Region VI	8.5	17.8	18.5	21.6	16.2	11.6	5.8	259
Region VII	7.1	15.5	20.2	23.5	15.1	12.2	6.3	238
Region VIII	15.4	17.2	21.0	19.9	14.2	7.9	4.5	267
AR	10.3	16.4	20.1	20.8	16.3	10.5	5.6	2197

Chi Square not significant

* Table constructed from smaller data file which joins Wave I & II

TABLE 5-2

HOUSEHOLD SIZE BY STATE AND AAA REGION (ALL ELDERS)

Percentage of Elders in Region/State

HOUSEHOLD SIZE	I	II	III	IV	V	VI	VII	VIII	AR*
One Person Household	23.4	25.9	27.4	23.6	34.6	29.9	35.0	20.5	27.5
Two Person Household	65.4	57.7	62.9	61.9	55.3	62.7	54.4	63.5	60.5
Three or More Person Household	9.2	16.4	9.7	14.5	10.1	7.4	10.6	16.1	12.0
Number	228	293	259	318	237	244	217	249	2045

Chi Square significant at the .0004 level

* Table constructed from smaller data file which joins Wave I & Wave II data.

TABLE 5-3

AAA REGIONS BY RACIAL/ETHNIC GROUP (ALL ELDERS)

	% of Elders in Racial/Ethnic Group	
	WHITE	OTHER
Region I	97.8	2.2
Region II	95.6	4.2
Region III	77.5	22.5
Region IV	69.5	30.5
Region V	84.7	15.3
Region VI	93.9	6.1
Region VII	79.2	20.8
Region VIII	94.3	5.7
AR	85.9	14.1
Number*	1726	284

Chi Square significant at the .0001 level

* Table constructed from smaller data file which joins Wave I & II data

TABLE 5-4
SEX AND MARITAL STATUS OF ELDERS BY STATE AND AAA REGION
(ALL ELDERS)

Percentage of Elders in Region/State

CHARACTERISTIC	I	II	III	IV	V	VI	VII	VIII	AR*
NS									
SEX									
Female	60.4	57.3	60.9	40.6	64.6	63.4	63.2	58.2	60.7
Male	39.6	42.7	39.1	59.4	35.4	36.6	36.8	41.8	39.3
MARITAL STATUS									
Married	70.3	66.5	60.1	65.5	57.5	63.7	62.2	71.9	64.8
Widowed	23.3	25.5	32.6	28.7	36.1	27.8	33.2	23.2	28.6
Separated/Div	2.8	4.8	3.3	4.1	3.6	5.4	1.7	2.2	3.6
Never Married	3.2	3.2	2.5	1.2	2.4	2.7	1.7	2.6	2.5
Other	.4	.3	1.4	.6	.4	.4	1.3	---	.5
Number	250	316	279	355	257	262	247	268	2234

Chi Square significant at the .04 level.

NS - Not significant

* Table constructed from smaller data file which joins Wave I & Wave II data

TABLE 5-5
EMPLOYMENT STATUS OF ELDERS BY STATE AND AAA REGION
(ALL ELDERS)

	Percentage of Elders in Region/State								
Employment Status	I	II	III	IV	V	VI	VII	VIII	AR*
UNGROUPED									
Retired	76.7	68.8	63.8	62.7	77.0	69.9	71.3	66.3	69.1
Full-time Emp.	8.4	14.5	12.0	15.3	7.9	9.7	8.0	15.7	11.7
Part-time Emp	4.4	3.9	5.4	6.4	5.2	4.2	6.8	5.6	5.2
Caregiver	.8	---	.7	1.2	---	.8	.8	---	.5
Poor Health	2.8	5.5	6.2	5.2	2.8	6.2	6.3	4.5	5.0
Don't want job	4.8	4.2	8.0	6.6	6.0	5.8	4.6	5.6	5.7
Work at home	.8	1.9	2.2	2.0	1.2	1.5	.8	1.9	1.6
Can't find job	.4	.6	1.1	.3	---	1.5	.4	---	.5
Other	.8	.6	.7	.3	---	.4	.8	.4	.5
Number	249	311	276	346	252	259	237	267	2197

Chi Square not significant

* Table constructed from smaller data file which joins Wave I & Wave II data

TABLE 5-6

INCOME BY STATE AND AAA REGION (ALL ELDERS)

	Percentage of Elders in Region/State							
INCOME	I	II	III	IV	V	VI	VII	VIII
$0-3,999	8.9	11.6	7.6	9.9	7.0	13.2	13.2	5.1
$4,000 -6,999	25.9	28.3	25.9	25.4	20.9	23.2	25.8	24.3
$7000 -9,999	13.3	19.3	20.0	19.4	19.8	25.8	17.0	13.6
$10,000 -14,999	14.6	15.9	15.1	16.8	24.5	16.5	19.5	23.7
$15,000 -19,999	18.4	7.7	10.3	9.1	4.7	9.3	9.4	5.6
$20,000 -29,999	12.0	8.2	10.8	9.9	9.3	6.2	8.2	7.9
$30,000 +	7.0	9.0	10.3	9.5	14.0	11.3	6.9	19.8
Number	158	233	185	232	172	194	232	172

Chi Square significant at the .0001 level

TABLE 5-7

HOUSEHOLD COMPOSITION BY AGE (ALL ELDERS)

Percentage of Elders in Age Cohort

HOUSEHOLD COMPOSITION	55-59	60-64	65-69	70-74	75-79	80-84	85+	AR
One Person Household	11.6	14.2	20.9	30.8	35.9	50.7	44.0	26.7
Two Person Household	62.8	64.1	69.3	61.5	58.3	45.9	39.4	60.5
Three or More Person Household	25.6	21.7	9.8	7.7	5.7	3.3	16.5	12.7
Number	333	345	417	429	348	209	109	2190

Chi Square significant at the .0001 level

TABLE 5-8

HOUSEHOLD COMPOSITION BY SEX
(ALL ELDERS)

	Percentage of Elders in Sex Type		
HOUSEHOLD COMPOSITION	MALE	FEMALE	AR
One Person Household	9.4	36.9	26.6
Two Person Household	76.5	51.6	60.6
Three or More Person Household	15.0	11.5	12.8
Number	817	1367	2184

Chi Square significant at the .0001 level

TABLE 5-9

HOUSEHOLD SIZE BY RACIAL/ETHNIC GROUP (ALL ELDERS)

% of Elders in Racial/Ethnic Group

HOUSEHOLD SIZE	WHITE	OTHER	AR
One Person Household	26.4	32.7	27.2
Two Person Household	61.5	52.3	60.2
Three or More Person Household	12.2	15.0	12.6
Number	1609	260	1869

Chi Square significant at the .05 level

TABLE 5-10
INCOME LEVEL BY AGE COHORT
(ALL ELDERS)

AGE COHORT	$0-3999	$4000-6999	$7000-9999	$10000-14999	$15000-19999	$20000-29999	$30000+	AR
55-59	5.5	5.6	7.2	6.8	11.3	17.5	24.0	8.9
60-64	8.5	15.3	20.6	28.0	34.6	41.3	36.0	24.0
65-69	12.7	17.5	20.3	16.8	24.1	19.6	12.0	18.1
70-74	18.8	18.3	24.2	20.5	13.2	12.6	12.0	18.3
75-79	9.1	13.8	10.1	9.0	8.2	3.5	8.0	9.4
80-84	20.6	12.3	8.5	9.0	2.3	3.5	4.0	9.5
85+	24.8	17.2	9.2	9.9	6.2	2.1	4.0	11.8
Number	256	268	306	322	257	143	75	1627

Chi Square significant at the .0001 level

TABLE 5-11

INCOME LEVEL BY RACIAL/ETHNIC GROUP
(ALL ELDERS)

	% of Elders in Racial/Ethnic Group		
INCOME	WHITE	OTHER	AR
$0-3999	6.7	18.1	8.3
$4000-6999	22.4	37.8	24.5
$7000-9999	18.4	22.8	19.0
$10000-14999	19.0	14.0	18.3
$15000-19999	11.1	1.6	9.8
$20000-29000	10.2	3.6	9.3
$30000+	12.2	2.1	10.8
Number	1193	193	1386

Chi Square significant at the .0001 level

TABLE 5-12
INCOME LEVEL BY SEX
(ALL ELDERS)

SEX	$0-3999	$4000-6999	$7000-9999	$10000-14999	$15000-19999	$20000-29999	$30000+	AR
Male	5.9	16.4	18.5	20.9	10.2	12.2	15.9	38.0
Female	10.7	28.8	18.0	16.7	8.6	7.9	9.3	62.0
Number	144	391	295	297	149	155	192	1623

Chi Square significant at the .0001 level

TABLE 5-13
PREVALENCE OF DIFFICULTY WITH ACTIVITIES OF DAILY LIVING BY AGE COHORT (ALL ELDERS)

Percentage of Elders in Age Cohort

ACTIVITY OF DAILY LIVING	55-59	60-64	65-69	70-74	75-79	80-84	85+	AR
Heavy Cleaning/ Yardwork[1]	21.1	19.6	21.8	26.2	41.2	50.2	54.0	29.7
Light Housework[1]	8.2	10.1	13.0	16.5	24.7	30.5	42.1	17.6
Walking[1]	6.9	8.2	6.7	9.7	19.5	21.5	37.3	12.6
Shopping[1]	3.9	4.1	4.9	7.8	15.1	23.2	41.3	10.5
Writing								
Cooking[1]	3.0	3.0	4.0	5.2	9.9	10.3	27.8	6.7
Getting Places[1]	4.3	5.2	5.2	8.2	15.1	21.5	35.7	10.4
Doing Laundry[1]	3.0	3.0	4.9	5.0	9.9	11.6	27.0	6.9
Business Affairs[1]	3.0	4.6	4.5	5.0	12.4	12.9	24.6	7.5
Bathe /Shampoo[1]	2.2	3.0	2.9	6.1	11.5	13.7	28.6	7.2
Bowel/Bladder Accidents[1]	2.6	4.9	4.0	6.7	9.9	14.2	25.4	7.5
Dress/ Grooming[1]	1.3	2.4	3.1	4.1	7.4	9.9	13.5	4.8
Take Medicine[2]	.9	3.0	2.7	2.8	3.8	5.6	11.1	3.4
Using Telephone[1]	.9	1.4	2.0	2.4	4.4	7.7	15.9	3.5
Using Toilet[1]	.9	.8	2.2	1.7	3.8	3.9	9.5	2.5
Feeding Self[3]	---	.3	.4	1.7	1.1	1.7	4.8	1.1
Number	360	368	445	462	364	233	126	2358

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[1] Chi Square significant at the .0001 level
[2] Chi Square significant at the .001 level
[3] Chi Square significant at the .01 level

TABLE 5-14
PREVALENCE OF DIFFICULTY WITH ACTIVITIES OF DAILY LIVING BY NUMBER IN HOUSEHOLD (ALL ELDERS)

Percentage of Elders in Household

	One Person Household	Two Person Household	Three or More Person Household	AR
Heavy Cleaning/ Yardwork[1]	49.9	20.7	30.8	29.6
Light Hsework[1]	27.8	12.9	17.0	17.3
Walking[1]	17.7	10.2	12.0	12.4
Shopping[1]	20.0	6.4	8.7	10.2
Writing[2]	13.9	8.0	7.6	9.4
Cooking[1]	7.6	4.8	12.7	6.6
Getting Places[1]	19.1	5.9	11.2	10.1
Doing Laundry[3]	8.2	5.3	9.9	6.6
Bus. Affairs[1]	13.1	4.8	9.0	7.5
Bathe/Shampoo	8.4	5.4	8.0	6.5
Bowel/Bladder Accidents[2]	11.2	5.9	6.5	7.3
Dress/Grooming[3]	5.4	3.8	7.9	4.7
Take Medicine	3.4	2.8	5.0	3.3
Using Telephone[3]	2.6	3.1	4.2	3.1
Using Toilet	1.8	2.1	3.6	2.2
Feeding Self	.7	.9	1.6	.9
Number	615	1454	321	2390

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[1] Chi Square significant at the .0001 level
[2] Chi Square significant at the .001 level
[3] Chi Square significant at the .01 level

TABLE 5-15

PREVALENCE OF IMPAIRMENT WITH ACTIVITIES OF DAILY LIVING BY RACIAL/ETHNIC GROUP (ALL ELDERS)

% of Elders in Racial/Ethnic Group

ACTIVITY	WHITE	OTHER	AR
Heavy Cleaning/ Yardwork[1]	28.5	40.6	30.2
Light Housework[3]	16.5	25.1	17.7
Walking[2]	11.7	19.1	12.7
Shopping[1]	9.2	21.9	11.0
Writing[1]	8.4	20.5	10.1
Cooking[1]	5.5	12.7	6.5
Getting Places[1]	9.3	18.0	10.5
Doing Laundry[1]	5.8	14.5	7.0
Bus. Affairs[3]	6.7	12.4	7.5
Bathe/Shampoo[4]	6.3	11.0	7.0
Bowel/Bladder Accidents[3]	7.0	13.1	7.8
Dress/Grooming	4.6	6.0	4.8
Take Medicine	3.2	4.9	3.4
Using Telephone	3.3	5.7	3.6
Using Toilet	2.4	3.2	2.5
Feeding Self	1.1	.7	1.0
Number	1741	283	2024

[1] Chi Square significant at the .0001 level
[2] Chi Square significant at the .001 level
[3] Chi Square significant at the .01 level
[4] Chi Square significant at the .05 level

TABLE 5-16

PREVALENCE OF DIFFICULTY WITH ACTIVITIES OF DAILY LIVING BY SEX (ALL ELDERS)

	Percentage of Elders in Sex Type		
ACTIVITY	MALE	FEMALE	AR
Heavy Cleaning/ Yardwork[1]	20.2	35.1	29.3
Light Housework[1]	9.6	22.3	17.4
Walking[3]	10.1	13.8	12.4
Shopping[1]	5.2	13.7	10.4
Writing	8.4	10.4	9.6
Cooking	5.6	7.4	6.7
Getting Places[1]	6.9	12.4	10.2
Doing Laundry[3]	5.0	8.1	6.9
Bus. Affairs[2]	4.8	9.1	7.4
Bathe/Shampoo	5.7	8.0	7.1
Bowel/Bladder Accidents[3]	5.0	8.9	7.4
Dress/Grooming	5.2	4.5	4.8
Take Medicine	3.6	3.2	3.4
Using Telephone[4]	4.6	2.7	3.4
Using Toilet	2.7	2.3	2.5
Feeding Self	1.5	.8	1.0
Number	930	1452	2382

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[1] Chi Square significant at the .0001 level
[2] Chi Square significant at the .001 level
[3] Chi Square significant at the .01 level
[4] Chi Square significant at the .05 level

TABLE 5-17

PREVALENCE OF DIFFICULTY WITH ACTIVITIES OF DAILY LIVING BY STATE AND AAA REGION (ALL ELDERS)

Percentage of Elders in Region/State

ACTIVITY OF DAILY LIVING	I	II	III	IV	V	VI	VII	VIII	AR*
Heavy Cleaning/ Yardwork	28.0	28.8	29.6	30.1	30.1	34.4	29.1	26.9	29.6
Light Hsework	19.2	16.1	20.6	16.3	16.3	22.5	12.1	18.7	17.7
Walking	11.6	14.2	12.3	13.8	14.0	12.2	10.1	11.2	12.5
Shopping	9.6	8.9	12.6	11.0	10.5	10.7	12.6	9.3	10.6
Writing	8.4	7.8	10.7	10.5	9.2	9.1	9.4	8.7	9.2
Cooking[1]	8.4	6.3	5.8	6.8	4.7	6.5	6.9	8.2	6.7
Getting Places	12.8	10.8	12.6	9.6	11.3	7.6	10.5	8.2	10.4
Doing Laundry[1]	9.2	5.1	8.3	8.2	5.4	5.3	6.9	6.7	6.9
Bus. Affairs	7.6	8.2	9.0	7.6	8.6	7.3	5.7	6.7	7.6
Bathe/Shampoo	8.0	7.6	7.6	6.2	5.4	8.8	7.3	8.2	7.3
Bowel/Bladder Accidents	8.0	7.9	8.7	8.7	7.0	8.5	8.1	4.1	7.7
Dress/Grooming	6.4	6.6	5.8	4.2	3.5	3.4	4.5	4.9	4.9
Take Medicine	3.2	5.7	2.9	4.8	1.9	2.7	2.0	3.0	3.4
Using Telephone	4.0	5.4	2.5	3.7	1.9	3.2	3.2	4.5	3.6
Using Toilet	2.4	2.5	2.2	3.7	2.7	2.3	2.8	1.5	2.6
Feeding Self[2]	.8	3.2	.7	1.4	--	.8	.8	.4	1.1
Number	250	316	277	355	257	262	247	268	2232

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[1] Chi Square significant at the .01 level

[2] Chi Square significant at the .05 level

*Tables constructed from smaller data file created by joining Wave I & Wave II data.

TABLE 5-18

SOURCES OF ASSISTANCE FOR ACTIVITIES OF DAILY LIVING BY AGE (ALL ELDERS)

SOURCES OF ASSISTANCE	55-59	60-64	65-69	70-74	75-79	80-84	85+	AR
Heavy Cleaning/ Yardwork[2]								
None	4.1	23.6	12.5	17.2	10.7	9.4	9.0	12.3
Informal	73.5	51.4	54.2	51.6	50.7	42.7	53.7	52.8
Formal	20.4	25.0	24.0	30.3	33.3	42.7	32.8	30.8
Combination	2.0	---	9.4	.8	5.3	5.1	4.5	4.1
Number	76	72	96	122	150	117	67	700
Light Housework[1]								
None	10.5	29.7	33.9	23.4	22.0	22.9	9.6	22.4
Informal	89.5	56.8	55.9	57.1	53.8	32.9	67.3	55.7
Formal	---	13.5	8.5	18.2	22.0	41.4	17.3	19.7
Combination	---	---	1.7	---	2.2	2.9	5.8	1.9
Number	29	37	59	77	91	70	52	415
Walking								
None	62.5	76.7	56.7	62.8	66.2	69.4	63.0	65.5
Informal	37.5	23.3	40.0	34.9	28.2	22.4	34.8	30.7
Formal	---	---	---	2.3	5.6	8.2	2.2	3.4
Combination	---	---	3.3	---	---	---	---	.3
Number	25	30	30	43	71	49	46	294
Shopping								
None	---	21.4	---	11.1	7.1	7.4	---	6.1
Informal	100.0	64.3	85.7	75.0	80.4	68.5	86.5	78.9
Formal	---	14.3	9.5	13.9	8.9	20.4	13.5	13.0
Combination	---	---	4.8	---	3.6	3.7	---	2.0
Number	14	14	21	36	56	54	52	247

TABLE 5-18 (cont.)

SOURCES OF ASSISTANCE FOR ACTIVITIES OF DAILY LIVING BY AGE (ALL ELDERS)

SOURCES OF ASSISTANCE	55-59	60-64	65-69	70-74	75-79	80-84	85+	AR
Cooking								
None	---	---	16.7	29.2	11.1	12.5	2.9	11.3
Informal	100.0	90.9	77.8	58.3	63.9	37.5	85.7	69.8
Formal	---	9.1	5.6	12.5	25.0	41.7	11.4	17.6
Combination	---	---	---	---	----	8.3	---	1.3
Number	11	11	18	24	36	24	35	159
Getting Places								
None	11.1	5.3	8.7	10.8	12.7	18.4	6.8	11.4
Informal	77.8	78.9	73.9	78.4	69.1	65.3	84.1	74.2
Formal	11.1	15.8	13.0	5.4	14.5	14.3	9.1	11.8
Combination	---	---	4.3	5.4	3.6	2.0	---	2.5
Number	14	19	23	37	55	49	44	241
Doing Laundry								
None	---	---	4.5	13.0	8.1	7.4	2.9	6.1
Informal	100.0	81.8	86.4	69.6	64.9	51.9	73.5	71.5
Formal	---	18.2	4.5	17.4	21.6	37.0	17.6	18.8
Combination	---	---	4.5	---	5.4	3.7	5.9	3.6
Number	11	11	22	23	37	27	34	165
Bus. Affairs								
None	---	5.6	15.0	4.5	6.8	3.2	9.7	6.8
Informal	100.0	77.8	85.0	81.8	90.9	93.5	90.3	88.7
Formal	---	16.7	---	13.6	2.3	3.2	---	4.5
Combination	---	---	---	---	---	---	---	---
Number	11	18	20	22	44	31	31	177
Bathe/Shampoo[3]								
None	40.0	9.1	15.4	17.9	19.0	16.1	16.7	17.8
Informal	40.0	81.8	53.8	64.3	54.8	32.3	58.3	54.0
Formal	20.0	9.1	7.7	17.9	23.8	48.4	19.4	24.0
Combination	---	---	23.1	---	2.4	3.2	5.6	4.1
Number	8	11	13	28	42	31	36	169

TABLE 5-18 (cont.)

SOURCES OF ASSISTANCE FOR ACTIVITIES OF DAILY LIVING BY AGE (ALL ELDERS)

SOURCES OF ASSISTANCE	55-59	60-64	65-69	70-74	75-79	80-84	85+	AR
Bowel/Bladder Accidents								
None	83.3	83.3	66.7	71.0	56.8	68.8	46.9	64.7
Informal	16.7	16.7	27.8	19.4	27.0	21.9	50.0	27.4
Formal	---	---	---	9.7	13.5	9.4	3.1	6.8
Combination	---	---	5.6	---	2.7	---	---	1.1
Number	9	18	18	31	37	32	32	177
Dress/Grooming								
None	33.3	11.1	21.4	26.3	25.9	34.8	5.9	23.4
Informal	66.7	77.8	64.3	57.9	55.6	26.1	70.6	55.6
Formal	---	11.1	---	15.8	14.8	34.8	17.6	16.7
Combination	---	---	14.3	---	3.7	4.3	5.9	4.4
Number	5	9	14	19	27	23	17	114
Take Medicine								
None	---	30.0	8.3	7.7	20.0	15.4	14.3	15.0
Informal	50.0	70.0	83.3	76.9	73.3	53.8	78.6	71.8
Formal	50.0	---	---	15.4	6.7	30.8	7.1	11.9
Combination	---	---	8.3	---	---	---	---	1.2
Number	3	10	12	13	15	13	14	80
Using Telephone								
None	50.0	16.7	44.4	18.2	31.3	44.4	19.0	30.4
Informal	50.0	83.3	44.4	63.6	68.8	38.9	81.0	62.5
Formal	---	---	---	18.2	---	16.7	---	5.9
Combination	---	---	11.1	---	---	---	---	1.2
Number	3	6	9	11	16	18	21	84
Using Toilet								
None	50.0	50.0	40.0	25.0	33.3	55.6	8.3	33.6
Informal	50.0	50.0	50.0	62.5	53.3	33.3	75.0	54.9
Formal	---	---	---	12.5	13.3	11.1	16.7	9.8
Combination	---	---	10.0	---	---	---	---	1.6
Number	3	4	10	8	15	9	12	61

TABLE 5-18

SOURCES OF ASSISTANCE FOR ACTIVITIES OF DAILY LIVING
BY AGE
(ALL ELDERS)

SOURCES OF ASSISTANCE	55-59	60-64	65-69	70-74	75-79	80-84	85+	AR
Feeding Self								
None	---	---	---	12.5	25.0	---	16.7	11.5
Informal	---	100.0	100.0	75.0	50.0	75.0	66.7	73.1
Formal	---	---	---	12.5	25.0	25.0	16.7	15.4
Combination	---	---	---	---	---	---	---	---
Number	0	1	3	8	4	4	6	26

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[1] Chi Square significant at the .0001 level
[2] Chi Square significant at the .001 level
[3] Chi Square significant at the .01 level

TABLE 5-19

SOURCES OF ASSISTANCE
BY NUMBER IN HOUSEHOLD
(ALL ELDERS)

Percentage of Elders in Household

SOURCE OF ASSISTANCE	One Person Household	Two Person Household	Three or More Person Household	AR
Heavy Cleaning/ Yardwork[1]				
None	11.3	16.7	5.8	12.8
Informal	41.1	57.0	77.0	52.8
Formal	41.6	23.6	15.2	30.3
Combination	6.0	2.7	2.0	4.0
Number	308	300	98	705
Light Housework[1]				
None	26.9	23.9	11.2	23.5
Informal	40.0	59.2	88.8	55.1
Formal	30.7	14.8	---	19.5
Combination	1.7	2.1	---	1.7
Number	173	186	55	414
Walking[2]				
None	75.9	66.3	46.1	67.2
Informal	19.4	31.0	53.9	29.7
Formal	4.7	2.0	---	2.7
Combination	---	.7	---	.3
Number	106	148	38	291
Shopping				
None	7.9	7.7	---	6.9
Informal	72.7	78.8	100.0	78.2
Formal	16.1	12.5	---	12.9
Combination	3.3	1.1	---	2.1
Number	121	93	28	242
Cooking[1]				
None	29.8	4.3	2.4	11.4
Informal	38.3	77.9	97.6	71.2
Formal	29.8	17.8	---	16.8
Combination	2.1	---	---	.6
Number	47	70	41	158

TABLE 5-19 (cont.)

SOURCES OF ASSISTANCE BY NUMBER IN HOUSEHOLD (ALL ELDERS)

Percentage of Elders in Household

SOURCE OF ASSISTANCE	One Person Household	Two Person Household	Three or More Person Household	AR
		Getting Places[3]		
None	8.4	15.4	4.3	10.3
Informal	68.7	75.7	91.4	74.7
Formal	18.5	7.7	4.3	12.5
Combination	4.4	1.2	---	2.6
Number	114	85	36	234
		Doing Laundry[3]		
None	7.9	7.8	---	6.3
Informal	57.4	68.3	100.0	71.2
Formal	26.8	21.4	---	18.8
Combination	7.9	2.6	---	3.8
Number	51	77	32	160
		Business Affairs		
None	7.4	8.2	3.3	7.0
Informal	87.0	84.2	96.7	87.6
Formal	5.6	7.5	---	5.4
Combination	---	---	---	---
Number	81	68	30	179
		Bathe/Shampoo[2]		
None	26.4	19.6	3.9	19.2
Informal	34.2	55.8	88.3	54.3
Formal	37.4	19.6	7.8	23.3
Combination	2.0	5.0	---	3.2
Number	50	79	26	155
		Bowel/Bladder Accidents[2]		
None	81.5	60.1	42.3	66.4
Informal	14.3	26.9	57.7	25.7
Formal	2.9	11.9	---	6.8
Combination	1.4	1.2	---	1.1
Number	70	84	22	176

TABLE 5-19 (cont.)

SOURCES OF ASSISTANCE
BY NUMBER IN HOUSEHOLD
(ALL ELDERS)

Percentage of Elders in Household

SOURCE OF ASSISTANCE	One Person Household	Two Person Household	Three or More Person Household	AR
Dress/Grooming[2]				
None	33.2	26.6	6.2	24.0
Informal	25.8	58.8	89.9	56.1
Formal	34.9	9.1	4.0	15.5
Combination	6.0	5.5	---	4.4
Number	33	55	25	113
Take Medicine[3]				
None	37.0	15.9	---	17.8
Informal	39.3	74.5	100.0	71.0
Formal	23.7	7.3	---	9.9
Combination	---	2.4	---	1.3
Number	19	41	16	77
Using Telephone				
None	43.8	32.2	15.8	31.2
Informal	43.8	61.2	84.2	62.4
Formal	12.5	4.4	---	5.2
Combination	---	2.2	---	1.3
Number	16	45	16	77
Using Toilet[3]				
None	72.7	31.4	13.4	35.9
Informal	---	59.3	86.6	53.2
Formal	27.3	6.2	---	9.1
Combination	---	3.1	---	1.8
Number	11	32	12	55
Feeding Self				
None	25.0	14.8	---	12.7
Informal	25.0	70.5	100.0	70.3
Formal	50.0	14.8	---	17.0
Combination	---	---	---	---
Number	4	14	6	24

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[1] Chi Square significant at the .0001 level
[2] Chi Square significant at the .001 level
[3] Chi Square significant at the .01 level

TABLE 5-20
SOURCE OF ASSISTANCE FOR ACTIVITIES OF DAILY LIVING BY RACIAL/ETHNIC GROUP

	% of Elders in Racial/Ethnic Group		
ACTIVITY	WHITE	OTHER	AR
Heavy Cleaning/ Yardwork			
None	12.2	13.8	12.5
Informal	52.1	50.9	51.9
Formal	32.3	28.4	31.5
Combination	3.4	6.9	4.1
Number	493	116	609
Light Housework			
None	22.2	31.0	24.0
Informal	54.5	52.1	54.0
Formal	20.5	15.5	19.5
Combination	2.4	1.4	2.2
Number	288	71	359
Walking			
None	67.0	63.0	66.1
Informal	30.0	33.3	30.7
Formal	2.5	3.7	2.8
Combination	---	---	---
Number	200	54	254
Shopping			
None	6.8	4.9	6.3
Informal	78.9	75.4	77.9
Formal	12.4	18.0	14.0
Combination	1.9	1.6	1.8
Number	161	61	222
Writing[1]			
None	2.9	4.9	3.2
Informal	5.1	13.1	6.2
Formal	.1	.7	.1
Combination	.2	1.8	.4
Number	1741	283	2024
Cooking[2]			
None	5.3	27.8	11.5
Informal	74.7	55.6	69.5
Formal	18.9	13.9	17.6
Combination	1.1	2.8	1.5
Number	95	36	131

TABLE 5-20 (cont.)

SOURCE OF ASSISTANCE FOR ACTIVITIES OF DAILY LIVING BY RACIAL/ETHNIC GROUP

(continued)

Getting Places[3]			
None	11.3	12.0	11.4
Informal	78.1	64.0	74.8
Formal	10.0	18.0	11.9
Combination	.6	6.0	1.9
Number	160	50	210
Doing Laundry			
None	8.8	2.4	7.0
Informal	70.6	73.2	71.3
Formal	16.7	22.0	18.2
Combination	3.9	2.4	3.5
Number	102	41	143
Bus. Affairs			
None	6.0	8.3	6.5
Informal	88.0	91.7	88.9
Formal	6.0	---	4.6
Combination	---	---	---
Number	117	36	153
Bathe/Shampoo			
None	15.6	22.6	17.1
Informal	59.6	41.9	55.7
Formal	20.2	32.3	22.9
Combination	4.6	3.2	4.3
Number	109	31	140
Bowel/Bladder Accidents			
None	66.9	55.6	64.3
Informal	26.4	30.6	27.4
Formal	5.0	13.9	7.0
Combination	1.7	---	1.3
Number	121	36	157
Dress/Grooming			
None	22.5	23.5	22.7
Informal	61.3	35.3	56.7
Formal	11.3	35.3	15.5
Combination	5.0	5.9	5.2
Number	80	17	97
Take Medicine			
None	12.7	14.3	13.0
Informal	78.2	71.4	76.8
Formal	7.3	14.3	8.7
Combination	1.8	---	---
Number	55	14	69

SOURCE OF ASSISTANCE FOR ACTIVITIES OF DAILY LIVING BY RACIAL/ETHNIC GROUP (continued)

Using Telephone			
None	34.5	25.0	32.4
Informal	60.3	68.8	62.2
Formal	3.4	6.3	4.1
Combination	1.7	---	1.4
Number	58	16	74
Using Toilet			
None	27.9	44.4	30.8
Informal	60.5	44.4	57.7
Formal	9.3	11.1	9.6
Combination	2.3	---	1.9
Number	43	9	52
Feeding Self			
None	10.5	---	9.5
Informal	78.9	50.0	76.2
Formal	10.5	50.0	14.3
Combination	---	---	---
Number	19	2	21

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[1] Chi Square significant at the .0001 level
[2] Chi Square significant at the .01 level
[3] Chi Square significant at the .05 level

TABLE 5-21

SOURCES OF ASSISTANCE FOR ACTIVITIES OF DAILY LIVING BY SEX (ALL ELDERS)

	Percentage of Elders in Sex Type		
SOURCE OF ASSISTANCE	MALE	FEMALE	AR
Heavy Cleaning/ Yardwork			
None	12.8	12.2	12.3
Informal	56.9	51.1	52.7
Formal	27.7	32.1	30.9
Combination	2.7	4.6	4.1
Number	188	509	697
Light Housework			
None	14.6	24.6	22.5
Informal	66.4	52.6	55.6
Formal	15.7	20.9	19.8
Combination	3.4	1.5	1.9
Number	89	325	414
Walking			
None	60.7	68.2	65.8
Informal	36.1	28.3	30.8
Formal	3.2	3.0	3.1
Combination	---	.5	.3
Number	93	197	290
Shopping			
None	2.1	7.1	6.1
Informal	85.6	77.2	78.9
Formal	12.3	13.2	13.0
Combination	---	2.5	2.0
Number	49	197	246
Cooking			
None	9.7	12.1	11.3
Informal	71.0	69.2	69.8
Formal	17.4	17.7	17.6
Combination	1.9	.9	1.3
Number	52	107	159

TABLE 5-21 (cont.)

SOURCES OF ASSISTANCE FOR ACTIVITIES OF DAILY LIVING BY SEX (ALL ELDERS)

	Percentage of Elders in Sex Type		
SOURCE OF ASSISTANCE	MALE	FEMALE	AR
Getting Places			
None	16.8	9.6	11.5
Informal	76.8	73.6	74.4
Formal	6.4	13.4	11.5
Combination	---	3.4	2.5
Number	63	176	239
Doing Laundry			
None	4.3	6.8	6.1
Informal	78.6	68.7	71.5
Formal	17.1	19.5	18.8
Combination	---	5.1	3.6
Number	47	118	165
Bus. Affairs			
None	8.9	6.1	6.8
Informal	84.5	90.1	88.7
Formal	6.7	3.8	4.5
Combination	---	---	---
Number	45	132	177
Bathe/Shampoo[1]			
None	11.3	20.8	17.8
Informal	75.5	44.1	54.0
Formal	9.4	30.7	24.0
Combination	3.8	4.3	4.1
Number	53	116	169
Bowel/Bladder Accidents[2]			
None	50.6	70.8	65.5
Informal	40.8	22.2	27.1
Formal	8.6	5.4	6.3
Combination	---	1.6	1.1
Number	47	129	175

TABLE 5-21 (cont.)

SOURCES OF ASSISTANCE FOR ACTIVITIES OF DAILY LIVING BY SEX (ALL ELDERS)

Percentage of Elders in Sex Type

SOURCE OF ASSISTANCE	MALE	FEMALE	AR
Dress/Grooming[3]			
None	16.5	28.5	23.4
Informal	73.2	42.3	55.5
Formal	8.2	23.0	16.7
Combination	2.1	6.1	4.4
Number	49	65	114
Take Medicine			
None	11.9	17.2	15.0
Informal	82.1	64.4	71.8
Formal	6.0	16.2	11.9
Combination	---	2.1	1.2
Number	34	47	80
Using Telephone			
None	37.5	22.5	30.4
Informal	57.9	67.5	62.5
Formal	4.5	7.5	5.9
Combination	---	2.5	1.2
Number	44	40	84
Using Toilet			
None	28.9	37.1	33.6
Informal	59.6	51.4	54.9
Formal	11.5	8.6	9.8
Combination	---	2.9	1.6
Number	26	35	61
Feeding Self			
None	6.7	18.2	11.5
Informal	80.0	63.6	73.1
Formal	13.3	18.2	15.4
Combination	---	---	---
Number	15	11	26

[1] Chi Square significant at the .001 level
[2] Chi Square significant at the .01 level
[3] Chi Square significant at the .05 level

TABLE 5-22
SOURCES OF ASSISTANCE FOR ADL DIFFICULTIES BY STATE AND AAA REGION (ALL ELDERS)

	Percentage of Elders with Difficulty in Region/State								
SOURCE OF ASSISTANCE	I	II	III	IV	V	VI	VII	VIII	AR
Heavy Housework[1]									
None	12.2	16.5	11.1	16.6	11.6	14.0	3.2	15.7	12.9
Informal	56.8	56.0	53.2	49.6	58.7	51.1	40.5	55.1	52.8
Formal	19.5	26.5	30.2	30.6	28.5	33.9	48.6	28.0	30.5
Combination	11.5	1.0	5.5	3.3	1.2	1.0	7.6	1.2	3.9
Number	75	101	90	122	83	98	79	81	740
Light Housework									
None	15.6	26.2	24.1	15.6	23.2	29.6	15.1	31.2	22.8
Informal	66.9	60.7	52.9	59.5	52.3	43.4	57.8	51.4	55.7
Formal	11.7	9.3	23.0	24.9	22.2	25.5	24.1	15.6	19.4
Combination	5.8	3.7	---	---	2.3	1.5	---	1.8	1.8
Number	51	54	61	65	43	65	33	55	436
Walking									
None	74.9	64.3	61.3	64.3	84.9	62.0	69.2	52.2	66.1
Informal	25.1	31.6	35.9	34.0	12.5	31.7	23.6	41.9	30.3
Formal	---	2.1	2.8	1.8	2.5	6.3	7.2	5.9	3.2
Combination	---	2.1	---	---	---	---	---	---	.3
Number	30	48	36	57	40	32	28	34	310
Shopping									
None	4.0	10.7	---	6.2	7.0	7.0	13.7	5.4	6.5
Informal	84.0	71.5	83.1	65.9	86.0	86.0	77.3	75.3	78.5
Formal	8.0	7.1	16.9	28.0	7.0	7.0	9.0	15.8	13.0
Combination	4.0	10.7	---	---	---	---	---	3.5	2.0
Number	25	28	36	41	29	29	33	29	255

TABLE 5-22 (cont.)
SOURCES OF ASSISTANCE FOR ADL DIFFICULTIES
BY STATE AND AAA REGION
(ALL ELDERS)

Percentage of Elders with Difficulty in Region/State

SOURCE OF ASSISTANCE	I	II	III	IV	V	VI	VII	VIII	AR*
Bathe/Shampoo									
None	10.0	12.5	23.8	9.5	14.3	39.1	11.1	18.2	17.8
Informal	65.0	58.3	38.1	71.4	57.1	30.4	50.0	59.1	53.4
Formal	20.0	16.7	38.1	19.0	28.6	26.1	33.3	18.2	24.5
Combination	5.0	12.5	---	---	---	4.3	5.6	4.5	4.3
Number	20	24	21	21	14	23	18	22	163
Bowel/Bladder Accidents									
None	80.0	40.0	60.9	48.4	88.9	73.9	73.7	75.0	64.9
Informal	20.0	52.0	26.1	38.7	11.1	17.4	21.1	16.7	27.5
Formal	---	8.0	8.7	12.9	--	4.3	5.3	8.3	6.4
Combination	---	---	4.3	---	---	4.1	---	---	1.2
Number	20	25	23	31	18	23	191	12	171
Dress/Grooming									
None	31.3	14.3	25.0	13.3	44.4	22.2	18.2	30.8	23.6
Informal	50.0	57.1	50.0	60.0	44.4	44.4	63.6	61.5	54.5
Formal	12.5	19.0	18.8	26.7	4.1	22.2	18.2	7.7	17.3
Combination	6.3	9.5	6.3	---	---	11.1	---	---	4.5
Number	16	21	16	15	9	9	11	13	110
Take Medicine									
None	---	27.8	12.5	23.5	20.0	---	---	---	14.5
Informal	77.8	61.1	87.5	58.8	80.0	100.0	60.0	87.5	72.4
Formal	22.2	5.6	---	17.6	---	---	40.0	12.5	11.8
Combination	---	5.2	---	---	---	---	---	---	1.3
Number	9	18	8	17	5	6	6	8	76
Using Telephone									
None	40.0	29.4	28.6	15.4	40.0	50.0	12.5	35.7	30.5
Informal	60.0	64.7	71.4	69.2	60.0	37.5	75.0	57.1	62.2
Formal	---	---	---	15.4	---	12.5	12.5	7.1	6.1
Combination	---	5.9	---	---	---	---	---	---	1.2
Number	10	17	7	13	5	8	8	14	82

TABLE 5-22 (cont.)
SOURCES OF ASSISTANCE FOR ADL DIFFICULTIES BY STATE AND AAA REGION (ALL ELDERS)

Percentage of Elders with Difficulty in Region/State

SOURCE OF ASSISTANCE	I	II	III	IV	V	VI	VII	VIII	AR*
Cooking									
None	19.0	5.0	18.8	---	8.3	23.5	17.6	9.1	12.1
Informal	71.4	85.0	68.8	66.7	58.3	47.1	58.8	77.3	67.8
Formal	4.8	10.0	12.5	33.3	33.3	29.4	23.5	9.1	18.8
Combination	4.8	---	---	---	---	---	---	4.5	1.3
Number	21	20	16	24	12	17	17	22	149
Getting Places									
None	---	12.5	28.6	8.8	3.4	30.0	4.0	4.5	11.4
Informal	83.9	81.3	51.4	76.5	79.3	60.0	80.0	81.8	74.1
Formal	16.1	3.1	20.0	2.9	17.2	10.0	16.0	9.1	11.8
Combination	---	3.1	---	10.7	---	---	---	16.7	2.4
Number	31	32	35	34	29	20	25	22	228
Doing Laundry									
None	---	12.5	8.7	3.4	---	20.0	5.9	5.6	6.5
Informal	73.9	68.8	73.9	58.6	85.7	53.3	76.5	72.2	69.7
Formal	13.0	12.5	17.4	37.9	14.3	26.7	17.6	11.1	20.0
Combination	13.0	6.3	---	---	---	---	---	11.1	3.9
Number	23	16	23	29	14	15	17	19	155
Business Affairs									
None	5.3	8.0	20.0	---	4.5	---	14.3	5.6	7.1
Informal	94.7	92.0	80.0	100.0	90.9	90.0	78.6	72.2	88.2
Formal	---	---	---	---	4.5	10.0	7.1	22.2	4.7
Combination	---	---	---	---	---	---	---	---	---
Number	19	25	25	27	22	20	14	28	170

TABLE 5-22 (cont.)
SOURCES OF ASSISTANCE FOR ADL DIFFICULTIES BY STATE AND AAA REGION (ALL ELDERS)

Percentage of Elders with Difficulty in Region/State

SOURCE OF ASSISTANCE	I	II	III	IV	V	VI	VII	VIII	AR*
Using Toilet									
None	25.0	12.5	50.0	23.1	71.4	66.7	14.3	25.0	33.9
Informal	75.0	62.5	33.3	76.9	14.3	16.7	57.1	75.0	54.2
Formal	---	12.5	16.7	---	14.3	16.7	28.6	---	10.2
Combination	---	12.5	---	---	---	---	---	---	1.7
Number	8	8	6	13	7	6	7	4	59
Feeding Self									
None	---	20.0	---	20.0	---	---	---	---	12.0
Informal	100.0	70.0	50.0	80.0	---	50.0	50.0	100.0	72.0
Formal	---	10.0	50.0	---	---	50.0	50.0	---	16.0
Combination	---	---	---	---	---	---	---	---	---
Number	2	10	2	5	0	2	2	2	25

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*Tables constructed from smaller data file created by joining Wave I & Wave II data.

TABLE 5-23

FREQUENCY OF ASSISTANCE WITH ACTIVITIES OF DAILY LIVING
(BY AGE)
(ALL ELDERS)

Percentage of Elders in Age Cohort

FREQUENCY	55-59	60-64	65-69	70-74	75-79	80-84	85+	AR
Heavy Cleaning/ Yardwork								
More than 1x/day or daily	4.3	3.6	8.6	11.1	15.6	12.1	18.2	11.0
More than 1x/week	6.4	5.5	7.4	4.0	5.5	4.0	7.3	5.5
Weekly or more than 1x/month	59.6	74.5	56.8	58.6	65.6	63.6	58.2	62.3
Monthly	29.8	16.4	27.2	26.3	13.3	20.2	16.4	21.1
Number	73	55	81	99	128	99	55	590
Light Housework[1]								
More than 1x/day or daily	37.5	62.5	73.0	48.2	40.6	54.7	76.1	55.0
More than 1x/week	18.7	4.2	2.7	16.1	26.1	20.8	6.5	15.4
Weekly or more than 1x/month	31.2	16.7	13.5	30.4	20.3	20.8	15.2	21.2
Monthly	12.5	16.7	10.8	5.4	13.0	3.8	2.2	8.4
Number	25	24	37	56	69	53	46	310
Walking								
More than 1x/day or daily	83.3	83.3	76.9	82.4	66.7	85.7	88.2	79.5
More than 1x/week	---	---	---	---	12.5	7.1	5.9	5.0
Weekly or more than 1x/month	---	16.7	23.1	17.6	12.5	7.1	5.9	12.0
Monthly	16.7	---	---	---	8.3	---	---	3.5
Number	9	6	13	17	24	14	17	100
Shopping								
More than 1x/day or daily	22.2	23.1	25.0	19.4	13.7	8.2	18.4	16.3
More than 1x/week	11.1	30.8	10.0	6.5	17.6	20.4	18.4	16.5
Weekly or more than 1x/month	66.7	38.5	55.0	51.6	58.8	61.2	46.9	54.8
Monthly	---	7.7	10.0	22.6	9.8	10.2	16.3	12.3
Number	14	13	20	31	51	49	49	227

TABLE 5-23 (cont.)

FREQUENCY OF ASSISTANCE WITH ACTIVITIES OF DAILY LIVING
(BY AGE)
(ALL ELDERS)

Percentage of Elders in Age Cohort

FREQUENCY	55-59	60-64	65-69	70-74	75-79	80-84	85+	AR
Cooking[1]								
More than 1x/day or daily	83.3	81.8	93.3	76.5	78.1	95.2	94.1	86.7
More than 1x/week	---	18.2	---	23.5	21.9	4.8	2.9	10.8
Weekly or more than 1x/month	16.7	---	---	---	---	---	2.9	1.8
Monthly	---	---	6.7	---	---	---	---	.7
Number	9	11	15	17	32	21	34	139
Getting Places								
More than 1x/day or daily	50.0	29.4	50.0	41.4	20.0	24.3	22.5	30.0
More than 1x/week	25.0	5.9	5.0	10.3	6.7	24.3	15.0	13.0
Weekly or more than 1x/month	25.0	52.9	25.0	31.0	57.8	37.8	52.5	43.5
Monthly	---	11.8	20.0	17.2	15.6	13.5	10.0	13.5
Number	12	17	20	29	45	37	40	200
Doing Laundry								
More than 1x/day or daily	16.7	36.4	28.6	30.0	30.3	40.0	22.6	29.6
More than 1x/week	33.3	9.1	4.8	15.0	30.3	20.0	12.9	18.0
Weekly or more than 1x/month	50.0	45.5	66.7	50.0	36.4	36.0	61.3	49.0
Monthly	---	9.1	---	5.0	3.0	4.0	3.2	3.3
Number	9	11	21	20	33	25	31	150
Bus. Affairs								
More than 1x/day or daily	33.3	7.1	35.3	19.0	18.4	14.3	32.0	21.7
More than 1x/week	16.7	7.1	5.9	14.3	7.9	7.1	8.0	8.9
Weekly or more than 1x/month	---	35.7	35.3	28.6	31.6	28.6	24.0	28.2
Monthly	50.0	50.0	23.5	38.1	42.1	50.0	36.0	41.1
Number	9	14	17	21	38	28	25	152
Bathe/Shampoo								
More than 1x/day or daily	---	80.0	63.6	50.0	39.4	51.9	70.0	53.8
More than 1x/week	33.3	10.0	18.2	27.3	18.2	25.9	16.7	20.7
Weekly or more than 1x/month	66.7	10.0	18.2	22.7	42.4	18.5	10.0	24.0
Monthly	---	---	---	---	---	3.7	3.3	1.5
Number	5	10	11	22	33	27	30	138

TABLE 5-23 (cont.)

FREQUENCY OF ASSISTANCE WITH ACTIVITIES OF DAILY LIVING
(BY AGE)
(ALL ELDERS)

	Percentage of Elders in Age Cohort							
FREQUENCY	55-59	60-64	65-69	70-74	75-79	80-84	85+	AR
Bowel/Bladder Accidents								
More than 1x/day or daily	---	100.0	57.1	16.7	64.7	55.6	50.0	54.7
More than 1x/week	---	---	14.3	---	5.9	---	14.3	6.8
Weekly or more than 1x/month	100.0	---	14.3	66.7	11.8	22.2	21.4	23.1
Monthly	---	---	14.3	16.7	17.6	22.2	14.3	15.4
Number	2	4	7	6	17	9	14	59
Dress/Grooming								
More than 1x/day or daily	100.0	100.0	81.8	78.6	75.0	78.6	75.0	80.3
More than 1x/week	---	---	18.2	14.3	25.0	14.3	12.5	15.1
Weekly or more than 1x/month	---	---	---	---	---	7.1	12.5	3.5
Monthly	---	---	---	7.1	---	---	---	1.2
Number	3	8	11	14	20	14	16	86
Take Medicine								
More than 1x/day or daily	100.0	71.4	100.0	90.9	81.8	50.0	84.6	81.8
More than 1x/week	---	---	---	9.1	9.1	10.0	---	4.5
Weekly or more than 1x/month	---	28.6	---	---	---	40.0	15.4	12.1
Monthly	---	---	---	---	9.1	---	---	1.5
Number	3	7	11	11	11	10	13	66
Using Telephone								
More than 1x/day or daily	100.0	100.0	80.0	71.4	63.6	85.7	69.2	74.5
More than 1x/week	---	---	---	---	9.1	14.3	---	4.2
Weekly or more than 1x/month	---	---	---	28.6	18.2	---	7.7	10.6
Monthly	---	---	20.0	---	9.1	---	23.1	10.6
Number	3	1	5	7	11	7	13	47
Using Toilet								
More than 1x/day or daily	100.0	100.0	83.3	100.0	88.9	100.0	100.0	94.5
More than 1x/week	---	---	16.7	---	---	---	---	2.7
Weekly or more than 1x/month	---	---	---	---	11.1	---	---	2.7
Monthly	---	---	---	---	---	---	---	---
Number	2	2	6	6	9	3	9	37

TABLE 5-23 (cont.)

FREQUENCY OF ASSISTANCE WITH ACTIVITIES OF DAILY LIVING
(BY AGE)
(ALL ELDERS)

Percentage of Elders in Age Cohort

FREQUENCY	55-59	60-64	65-69	70-74	75-79	80-84	85+	AR
Feeding Self								
More than 1x/day or daily	---	100.0	100.0	100.0	100.0	75.0	100.0	95.7
More than 1x/week	---	---	---	---	---	---	---	---
Weekly or more than 1x/month	---	---	---	---	---	25.0	---	4.3
Monthly	---	---	---	---	---	---	---	---
Number		1	3	7	3	4	5	23

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[1] Chi Square significant at the .01 level

TABLE 5-24

FREQUENCY OF ASSISTANCE WITH ACTIVITIES OF DAILY LIVING BY NUMBER IN HOUSEHOLD

Percentage of Elders in Household

FREQUENCY	One Person Household	Two Person Household	Three or More Person Household	AR
Heavy Cleaning/Yardwork[2]				
More than 1x/day or daily	5.6	12.8	20.3	10.7
More than 1x/week	4.4	6.5	6.6	5.6
Weekly or more than 1x/month	71.1	56.3	58.6	63.2
Monthly	18.9	24.3	14.5	20.5
Number	249	231	84	564
Light Housework[1]				
More than 1x/day or daily	33.6	61.1	88.2	53.8
More than 1x/week	23.1	11.4	8.2	15.7
Weekly or more than 1x/month	28.1	21.2	3.6	21.4
Monthly	15.2	6.3	---	9.0
Number	119	128	43	290
Walking				
More than 1x/day or daily	66.5	87.0	73.8	78.5
More than 1x/week	7.8	2.2	10.5	5.5
Weekly or more than 1x/month	19.6	8.7	10.5	12.1
Monthly	6.1	2.2	5.2	3.9
Number	26	46	19	91
Shopping				
More than 1x/day or daily	10.2	21.2	30.0	16.8
More than 1x/week	19.5	14.9	13.3	17.0
Weekly or more than 1x/month	56.3	51.5	45.4	53.2
Monthly	13.9	12.4	11.3	13.0
Number	108	81	27	215

TABLE 5-24 (cont.)

FREQUENCY OF ASSISTANCE WITH ACTIVITIES OF DAILY LIVING BY NUMBER IN HOUSEHOLD

Percentage of Elders in Household

FREQUENCY	One Person Household	Two Person Household	Three or More Person Household	AR
Cooking				
More than 1x/day or daily	78.8	87.3	93.0	86.8
More than 1x/week	18.2	11.1	2.7	10.5
Weekly or more than 1x/month	3.0	---	4.2	1.9
Monthly	---	100.0	---	.8
Number	33	63	37	133
Getting Places[2]				
More than 1x/day or daily	17.0	44.5	34.9	29.2
More than 1x/week	16.0	1.6	26.8	12.9
Weekly or more than 1x/month	50.0	38.0	34.9	43.5
Monthly	17.0	15.8	3.3	14.4
Number	94	63	30	187
Doing Laundry				
More than 1x/day or daily	23.4	33.6	39.1	31.3
More than 1x/week	21.3	14.0	23.3	18.4
Weekly or more than 1x/month	53.2	47.7	34.0	46.8
Monthly	2.1	4.7	3.6	3.6
Number	47	64	28	139
Bus. Affairs				
More than 1x/day or daily	22.4	16.9	32.5	22.2
More than 1x/week	8.6	2.0	22.5	8.7
Weekly or more than 1x/month	23.0	41.5	8.1	26.9
Monthly	46.0	39.6	36.9	42.2
Number	70	51	25	145
Bathe/Shampoo				
More than 1x/day or daily	36.8	55.6	76.4	53.7
More than 1x/week	23.7	25.3	8.5	21.5
Weekly or more than 1x/month	36.8	19.1	15.1	24.0
Monthly	2.6	---	---	.8
Number	38	58	24	119

TABLE 5-24 (cont.)

FREQUENCY OF ASSISTANCE WITH ACTIVITIES OF DAILY LIVING BY NUMBER IN HOUSEHOLD

Percentage of Elders in Household

FREQUENCY	One Person Household	Two Person Household	Three or More Person Household	AR
Bowel/Bladder Accidents				
More than 1x/day or daily	25.0	50.8	84.6	53.2
More than 1x/week	8.3	6.8	7.7	7.3
Weekly or more than 1x/month	50.0	22.2	---	23.0
Monthly	16.7	20.3	7.7	16.5
Number	12	30	13	55
Dress/Grooming[4]				
More than 1x/day or daily	55.0	86.8	91.1	80.1
More than 1x/week	40.0	7.9	8.9	16.1
Weekly or more than 1x/month	5.0	2.6	---	2.5
Monthly	---	2.6	---	1.2
Number	20	38	23	81
Take Medicine				
More than 1x/day or daily	62.1	87.7	93.3	84.5
More than 1x/week	19.0	---	---	3.4
Weekly or more than 1x/month	19.0	9.2	6.7	10.3
Monthly	---	3.1	---	1.7
Number	11	33	15	58
Using Telephone				
More than 1x/day or daily	55.6	86.7	70.0	75.9
More than 1x/week	11.1	---	---	2.4
Weekly or more than 1x/month	22.2	4.4	10.0	9.6
Monthly	11.1	8.9	20.0	12.0
Number	9	23	10	42
Using Toilet				
More than 1x/day or daily	100.0	94.7	90.0	93.8
More than 1x/week	---	5.3	---	3.1
Weekly or more than 1x/month	---	---	100.0	3.1
Monthly	---	---	---	---
Number	3	19	10	32

TABLE 5-24 (cont.)

FREQUENCY OF ASSISTANCE WITH ACTIVITIES OF DAILY LIVING BY NUMBER IN HOUSEHOLD

Percentage of Elders in Household

FREQUENCY	One Person Household	Two Person Household	Three or More Person Household	AR
Feeding Self				
More than 1x/day or daily	100.0	100.0	100.0	100.0
More than 1x/week	---	---	---	---
Weekly or more than 1x/month	---	---	---	---
Monthly	---	---	---	---
Number	3	11	6	20

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[1] Chi Square significant at the .0001 level
[2] Chi Square significant at the .001 level
[3] Chi Square significant at the .01 level
[4] Chi Square significant at the .05 level

TABLE 5-25

PREVALENCE OF NEEDING MORE HELP WITH ACTIVITIES OF DAILY LIVING BY NUMBER IN HOUSEHOLD

Percentage of Elders in Household

MORE HELP	One Person Household	Two Person Household	Three or More Person Household	AR
Heavy Cleaning/ Yardwork[1]				
Yes	85.8	74.0	80.2	80.0
No	10.5	18.6	13.3	14.3
Sometimes	3.7	7.3	6.6	5.6
Number	258	248	84	590
Light Housework				
Yes	84.5	73.6	77.3	78.5
No	9.4	17.2	18.4	14.2
Sometimes	6.1	9.2	4.3	7.2
Number	123	137	47	307
Walking				
Yes	92.2	66.8	90.1	78.[illegible]
No	3.9	21.6	5.0	13.[illegible]
Sometimes	3.9	11.6	5.0	8.1
Number	26	49	20	95
Shopping*				
Yes	91.5	83.3	87.2	87.9
No	8.5	9.9	12.8	9.6
Sometimes	---	6.8	---	2.6
Number	106	81	28	215
Cooking				
Yes	90.6	75.1	80.3	80.2
No	6.3	17.4	14.5	14.0
Sometimes	3.1	7.5	5.2	5.8
Number	32	66	38	137

TABLE 5-25 (cont.)

PREVALENCE OF NEEDING MORE HELP WITH ACTIVITIES OF DAILY LIVING BY NUMBER IN HOUSEHOLD

	Percentage of Elders in Household			
MORE HELP	One Person Household	Two Person Household	Three or More Person Household	AR
Getting Places				
Yes	90.8	67.0	89.0	82.5
No	8.1	26.2	11.0	14.7
Sometimes	1.0	6.8	---	2.8
Number	98	67	32	198
Doing Laundry				
Yes	93.3	84.3	91.6	88.7
No	6.7	10.4	8.4	8.8
Sometimes	---	5.3	---	2.5
Number	45	67	30	142
Bus. Affairs				
Yes	94.5	92.6	89.2	92.9
No	5.5	3.7	7.2	5.1
Sometimes	---	3.7	3.6	1.9
Number	72	54	28	155
Bathe/Shampoo				
Yes	86.8	83.2	80.0	83.8
No	5.8	12.7	15.0	11.2
Sometimes	7.4	4.1	4.2	5.0
Number	35	63	24	121
Bowel/Bladder Accidents				
Yes	84.6	90.5	79.7	86.8
No	15.4	3.2	20.3	9.7
Sometimes	---	6.3	---	3.5
Number	13	32	13	57
Dress/Grooming				
Yes	87.3	81.2	84.3	83.5
No	5.0	10.0	15.7	10.3
Sometimes	7.7	8.8	---	6.1
Number	20	40	23	83

TABLE 5-25 (cont.)

PREVALENCE OF NEEDING MORE HELP WITH ACTIVITIES OF DAILY LIVING BY NUMBER IN HOUSEHOLD

Percentage of Elders in Household

MORE HELP	One Person Household	Two Person Household	Three or More Person Household	AR
Take Medicine				
Yes	82.0	82.2	93.8	85.2
No	18.0	14.8	---	11.5
Sometimes	---	3.0	6.2	3.3
Number	11	34	16	61
Using Telephone				
Yes	80.0	77.1	85.2	79.8
No	10.0	19.4	7.4	14.5
Sometimes	10.0	3.5	7.4	5.7
Number	10	29	14	52
Using Toilet				
Yes	100.0	56.9	90.0	70.4
No	---	43.1	10.0	29.6
Sometimes	---	---	---	---
Number	3	21	10	34
Feeding Self				
Yes	66.7	82.7	100.0	84.7
No	---	8.7	---	5.1
Sometimes	33.3	8.7	---	10.2
Number	3	12	5	20

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[1] Chi Square significant at the .05 level

TABLE 5-26
PREVALENCE OF NEEDING MORE HELP WITH ACTIVITIES OF DAILY LIVING BY RACIAL/ETHNIC GROUP

Percentage of Households in Racial/Ethnic Group

ACTIVITY	WHITE	OTHER	AR
Heavy Cleaning/ Yardwork			
Yes	83.0	74.2	81.3
No	12.4	16.5	13.2
Sometimes	4.6	9.3	5.5
Number	411	97	508
Light Housework			
Yes	82.9	75.5	81.5
No	11.1	20.4	12.8
Sometimes	6.0	4.1	5.7
Number	216	49	265
Walking			
Yes	84.1	65.0	79.5
No	9.5	30.0	14.5
Sometimes	6.6	5.0	6.0
Number	63	20	83
Shopping			
Yes	88.7	83.9	87.3
No	9.9	14.3	11.2
Sometimes	1.4	1.8	1.5
Number	141	56	197
Writing[1]			
Yes	4.6	12.7	5.7
No	.7	2.5	1.0
Sometimes	.1	---	.0
Number	1741	283	2024
Cooking			
Yes	85.2	80.0	84.1
No	10.2	20.0	12.4
Sometimes	4.5	---	3.5
Number	88	25	113

TABLE 5-26
PREVALENCE OF NEEDING MORE HELP WITH ACTIVITIES OF DAILY LIVING BY RACIAL/ETHNIC GROUP (continued)
Percentage of Households in Racial/Ethnic Group

ACTIVITY	WHITE	OTHER	AR
Doing Laundry			
Yes	89.7	87.2	88.9
No	10.3	10.3	10.3
Sometimes	---	2.6	.8
Number	87	39	126
Bus. Affairs			
Yes	95.1	90.0	94.0
No	4.9	10.0	6.0
Sometimes	---	---	---
Number	103	30	133
Bathe/Shampoo			
Yes	84.1	78.3	82.9
No	12.5	17.4	13.5
Sometimes	3.4	4.3	3.6
Number	88	23	111
Bowel/Bladder			
Yes	89.7	81.3	87.3
No	7.7	18.8	10.9
Sometimes	2.6	---	1.8
Number	39	16	55
Dress/Grooming			
Yes	86.4	69.2	83.3
No	10.2	23.1	12.5
Sometimes	3.4	7.7	4.2
Number	59	13	72
Take Medicine			
Yes	89.1	75.0	86.2
No	8.7	25.0	12.1
Sometimes	2.2	---	1.7
Number	46	12	58

TABLE 5-26
PREVALENCE OF NEEDING MORE HELP WITH ACTIVITIES OF DAILY LIVING BY RACIAL/ETHNIC GROUP

Percentage of Households in Racial/Ethnic Group
(continued)

ACTIVITY	WHITE	OTHER	AR
Using Telephone			
Yes	75.7	91.7	79.6
No	18.9	8.3	16.3
Sometimes	5.4	---	4.1
Number	37	12	49
Using Toilet			
Yes	78.6	40.0	72.7
No	21.4	60.0	27.3
Sometimes	---	---	---
Number	28	5	33
Feeding Self			
Yes	82.4	100.0	84.2
No	11.8	---	10.5
Sometimes	5.9	---	5.3
Number	17	2	19

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[1] Chi Square significant at the .0001 level

TABLE 5-27

PREVALENCE OF NEEDING MORE HELP WITH ACTIVITIES OF DAILY LIVING BY SEX (ALL ELDERS)

Percentage of Elders in Sex Type

ACTIVITY	MALE	FEMALE	AR
Heavy Cleaning/ Yardwork			
Yes	78.7	80.2	79.8
No	14.7	13.7	14.0
Sometimes	6.6	6.0	6.2
Number	160	424	584
Light Housework			
Yes	77.4	80.1	79.5
No	16.0	13.1	13.8
Sometimes	6.6	6.7	6.7
Number	75	237	312
Walking			
Yes	77.6	82.2	80.5
No	16.8	11.4	13.4
Sometimes	5.6	6.5	6.2
Number	36	62	97
Shopping			
Yes	82.9	88.2	87.1
No	10.7	10.1	10.2
Sometimes	6.4	1.7	2.7
Number	47	174	221
Cooking			
Yes	74.3	83.5	80.3
No	17.1	11.0	13.1
Sometimes	8.6	5.5	6.6
Number	47	91	137
Getting Places[1]			
Yes	68.8	86.7	82.1
No	25.4	11.9	15.4
Sometimes	5.9	1.4	2.5
Number	51	147	198

TABLE 5-27
PREVALENCE OF NEEDING MORE HELP WITH ACTIVITIES OF DAILY LIVING BY SEX
(ALL ELDERS)

Percentage of Elders in Sex Type (continued)

ACTIVITY	MALE	FEMALE	AR
Doing Laundry			
Yes	84.0	89.9	88.1
No	13.7	8.2	9.8
Sometimes	2.3	1.9	2.0
Number	44	104	148
Bus. Affairs			
Yes	86.5	94.0	92.2
No	8.1	4.3	5.2
Sometimes	5.4	1.7	2.6
Number	37	117	154
Bathe/Shampoo			
Yes	82.6	82.3	82.4
No	13.0	13.2	13.1
Sometimes	4.3	4.6	4.5
Number	46	88	134
Bowel/Bladder Accidents			
Yes	81.0	89.6	86.6
No	14.3	7.8	10.1
Sometimes	4.8	2.6	3.4
Number	21	39	60
Dress/Grooming			
Yes	84.8	83.1	83.9
No	10.1	12.5	11.4
Sometimes	5.1	4.5	4.8
Number	40	45	84
Take Medicine			
Yes	89.8	80.8	84.9
No	6.8	16.4	12.1
Sometimes	3.4	2.7	3.0
Number	30	37	67

TABLE 5-27
PREVALENCE OF NEEDING MORE HELP WITH ACTIVITIES OF DAILY LIVING BY SEX
(ALL ELDERS)

Percentage of Elders in Sex Type (continued)

ACTIVITY	MALE	FEMALE	AR
Using Telephone			
Yes	78.6	80.0	79.3
No	14.2	16.7	15.5
Sometimes	7.1	3.3	5.2
Number	28	30	58
Using Toilet			
Yes	78.4	68.4	73.4
No	21.6	31.6	26.6
Sometimes	---	---	---
Number	19	19	38
Feeding Self			
Yes	76.9	88.9	81.8
No	15.4	---	9.1
Sometimes	7.7	11.1	9.1
Number	13	9	22

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[1] Chi Square Significant at the .01 level

TABLE 5-28
ELDERS NEEDING MORE ASSISTANCE WITH ACTIVITIES OF DAILY LIVING BY STATE AND AAA REGION (ALL ELDERS)

	Percentage of Elders in Region/State								
MORE HELP	I	II	III	IV	V	VI	VII	VIII	AR*
Heavy Cleaning/ Yardwork									
Yes	88.6	79.4	70.5	76.6	77.7	78.1	80.4	87.2	78.8
No	4.9	12.5	22.0	10.6	21.6	13.2	14.0	7.5	13.8
Sometimes	3.3	8.1	6.2	11.8	1.4	7.5	2.8	3.8	6.1
Number	61	81	80	99	72	80	72	67	623
Light Housework									
Yes	80.6	75.3	84.8	74.3	76.5	87.2	68.6	81.7	78.5
No	14.5	16.9	8.7	13.2	17.6	5.9	27.8	8.4	13.8
Sometimes	4.8	7.8	6.5	12.4	5.9	6.9	3.7	4.3	7.1
Number	41	39	46	54	34	43	27	36	328
Walking									
Yes	100.0	80.0	66.7	61.5	100.0	76.9	68.6	81.4	76.3
No	---	13.2	20.0	16.7	---	15.4	20.9	6.2	12.8
Sometimes	---	6.6	6.7	21.8	---	---	---	6.2	7.2
Number	7	15	15	21	6	13	10	16	106
Shopping									
Yes	90.9	80.5	79.7	81.7	100.0	83.7	77.6	92.4	85.5
No	4.5	7.8	17.4	11.7	---	8.1	22.4	3.8	10.0
Sometimes	4.5	11.7	---	4.0	---	4.1	---	---	2.8
Number	22	26	35	39	26	25	29	26	232
Cooking									
Yes	88.7	73.7	64.5	81.9	72.7	83.3	87.2	95.4	80.4
No	11.3	10.5	21.3	18.1	18.2	---	12.8	4.6	13.3
Sometimes	---	15.8	14.2	---	9.1	16.7	---	---	6.3
Number	18	19	14	25	11	12	16	22	143
Getting Places									
Yes	93.1	82.5	66.7	69.9	80.5	71.1	82.3	91.9	81.0
No	6.9	14.0	29.2	25.0	13.0	20.3	13.8	4.0	14.9
Sometimes	---	3.5	4.2	5.1	3.3	8.0	---	---	2.6
Number	29	29	24	30	31	13	26	25	212

TABLE 5-28
ELDERS NEEDING MORE ASSISTANCE WITH ACTIVITIES OF DAILY LIVING BY STATE AND AAA REGION (ALL ELDERS)

(continued)

Percentage of Elders in Region/State

MORE HELP	I	II	III	IV	V	VI	VII	VIII	AR*
Doing Laundry									
Yes	95.6	72.7	86.1	80.2	86.3	100.0	78.7	100.0	87.8
No	4.4	9.1	13.1	14.8	13.7	---	21.3	---	9.8
Sometimes	---	18.2	---	5.0	---	---	---	---	2.3
Number	23	11	22	31	15	11	17	18	153
Bus. Affairs									
Yes	94.8	86.4	84.7	92.4	93.5	79.5	100.0	100.0	91.2
No	---	4.5	15.3	7.6	---	10.2	---	---	4.9
Sometimes	---	9.0	---	---	---	10.2	---	---	2.4
Number	19	22	20	26	24	20	12	19	165
Bathe/Shampoo									
Yes	76.5	85.4	87.9	72.6	92.0	93.1	54.4	86.4	80.2
No	23.5	9.7	6.0	20.4	---	---	33.5	5.4	12.7
Sometimes	---	4.9	---	7.0	8.0	6.9	---	8.4	5.0
Number	17	21	17	22	13	15	17	19	142
Bowel/Bladder Accidents									
Yes	100.0	85.2	66.7	85.6	100.0	83.3	100.0	60.0	83.6
No	---	---	33.3	14.4	---	---	---	20.0	10.2
Sometimes	---	7.4	---	---	---	16.7	---	---	3.1
Number	5	14	9	18	2	6	6	5	64
Dress/Grooming									
Yes	90.0	82.9	91.3	73.0	100.0	100.0	62.8	74.8	82.8
No	10.0	5.7	8.7	16.8	---	---	37.2	9.9	11.4
Sometimes	---	11.4	---	10.2	---	---	---	15.3	5.8
Number	10	18	12	15	5	7	10	10	88
Take Medicine[1]									
Yes	89.5	84.1	57.1	77.9	100.0	84.7	100.0	100.0	84.5
No	10.5	8.0	42.9	22.1	---	---	---	---	11.3
Somestimes	---	8.0	---	---	---	---	---	---	2.8
Number	10	13	7	14	5	7	6	9	71

Percentage of Elders in Region/State (continued)

MORE HELP	I	II	III	IV	V	VI	VII	VIII	AR*
Using Telephone									
Yes	84.7	72.7	60.0	56.2	100.0	75.0	86.8	91.3	77.0
No	15.3	9.1	20.0	43.8	---	---	13.2	8.7	16.5
Sometimes	---	18.2	20.0	---	---	---	---	---	4.9
Number	7	11	5	12	3	4	8	12	61
Using Toilet									
Yes	100.0	83.0	100.0	45.0	100.0	50.0	66.7	66.7	69.5
No	---	16.7	---	27.0	---	50.0	16.7	33.3	17.7
Sometimes	---	---	---	27.9	---	---	---	---	10.3
Number	6	6	3	11	2	2	6	3	40
Feeding Self									
Yes	100.0	75.0	100.0	78.0	---	100.0	50.0	100.0	82.3
No	---	25.0	---	22.0	---	---	50.0	---	8.9
Sometimes	---	25.0	---	---	---	---	---	---	8.9
Number	2	8	2	5	0	2	2	1	23

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[1] Chi square significant at the .05 level

*Weighted totals include individuals for whom regional values are missing.

TABLE 5-29

LEVEL OF ADL IMPAIRMENT BY AGE COHORT

NUMBER OF IMPAIRMENTS	55-59	60-64	65-69	70-74	75-79	80-84	85+	AR
None	88.8	88.3	89.7	82.0	71.2	67.0	47.6	80.0
One	9.1	8.2	5.2	11.0	16.5	16.3	19.8	11.1
Two	1.7	1.1	2.7	4.3	5.5	7.3	15.1	4.3
Three or more	.4	2.4	2.5	2.6	6.9	9.4	17.5	4.6
Number	232	368	446	462	364	233	126	2231

Chi Square significant at the .0001 level

TABLE 5-30
LEVEL OF ADL IMPAIRMENT BY NUMBER IN HOUSEHOLD

Percentage of Elders in Household

Number of Impairments	One Person Household	Two Person Household	Three or More Person Household
None	71.4	83.4	81.9
One	16.6	10.1	6.8
Two	7.5	2.7	4.4
Three or more	4.5	3.8	6.8
Number	574	1259	249

Chi Square significant at the .0001 level

TABLE 5-31

LEVEL OF ADL IMPAIRMENT BY SEX

	Percentage of Elders in Sex Type		
Number of Impairments	MALE	FEMALE	AR
None	85.5	77.1	80.4
One	7.3	13.3	10.9
Two	2.5	5.3	4.2
Three or more	4.7	4.4	4.5
Number	888	1371	2259

Chi Square significant at the .0001 level

TABLE 5-32

LEVEL OF ADL IMPAIRMENT BY INCOME

Number of Impairments	$0-3999	$4000-6999	$7000-9999	$10000-14999	$15000-19999	$20000-29999	$30000+	AR
None	71.6	65.5	78.9	84.4	83.3	93.4	90.5	78.9
One	17.7	18.7	11.6	10.3	6.9	2.9	8.9	12.2
Two	7.1	8.1	4.6	2.5	3.5	1.5	---	4.4
Three or more	3.5	7.8	4.9	2.8	6.3	2.2	.6	4.5
Number	141	385	285	282	144	136	169	1542

Chi Square significant at the .0001 level

Table 5-33

LEVEL OF ADL IMPAIRMENT BY TYPE OF INSURANCE COVERAGE

NUMBER OF IMPAIRMENTS	NONE	PUBLIC ONLY	MIXTURE	PRIVATE ONLY	AR
None	91.2	67.3	79.9	92.1	81.0
One	6.1	17.2	10.7	5.9	10.6
Two	1.1	7.5	4.6	1.1	4.1
Three or more	1.5	8.1	4.8	.9	4.4
Number	261	483	1140	458	2342

Chi Square significant at the .0001 level

TABLE 5-34

LEVEL OF IADL IMPAIRMENT BY AGE

Percentage of Elders in Age Cohort

LEVEL OF IMPAIRMENT	55-59	60-64	65-69	70-74	75-79	80-84	85+	AR
None	78.0	74.5	72.9	64.1	47.0	40.3	23.8	61.5
One	12.5	12.5	13.7	18.2	22.8	21.0	18.3	16.8
Two	3.4	6.8	5.2	7.8	10.7	9.4	10.3	7.4
Three	6.0	6.3	8.3	10.0	19.5	29.2	47.6	14.3
Number	232	368	446	462	364	233	126	2231

Chi Square significant at the .0001 level

TABLE 5-35
LEVEL OF IADL IMPAIRMENT BY NUMBER IN HOUSEHOLD

Percentage of Elders in Household

NUMBER OF IMPAIRMENTS	One Person Household	Two Person Household	Three or More Person Household	AR
None	39.0	70.5	63.1	60.9
One	23.5	14.6	14.5	17.1
Two	12.7	5.5	5.6	7.5
Three	24.7	9.5	16.9	14.6
Number	574	1259	249	2082

Chi Square significant at the .0001 level

TABLE 5-36

LEVEL OF IADL IMPAIRMENT BY SEX

	Percentage of Elders in Sex Type		
NUMBER OF IMPAIRMENTS	MALE	FEMALE	AR
None	73.8	54.5	62.1
One	12.5	19.1	16.5
Two	5.2	8.8	7.3
Three or more	8.6	17.7	14.1
Number	888	1371	2259

Chi Square significant at the .0001 level

TABLE 5-37

LEVEL OF IADL IMPAIRMENT BY INCOME

Percentage of Elders in Income Group

Number of Impairments	$0 3999	$4000 -6999	$7000 -9999	$10000 -14999	$15000 -19999	$20000 -29999	$30000+	AR
None	43.3	39.2	63.2	65.2	70.1	78.7	80.5	59.7
One	17.7	18.2	16.1	22.3	11.8	12.5	13.0	16.9
Two	13.5	11.7	8.8	5.7	4.9	6.6	3.6	8.2
Three or more	25.5	30.9	11.9	6.7	13.2	2.2	3.0	15.2
Number	141	385	285	282	144	136	169	1542

Chi Square significant at the .0001 level.

Table 5-38

LEVEL OF IADL IMPAIRMENT BY TYPE OF INSURANCE COVERAGE

Percentage of Elders in Insurance Group

NUMBER OF IMPAIRMENTS	NONE	PUBLIC ONLY	MIXTURE	PRIVATE ONLY	AR
None	82.8	45.5	58.4	83.0	63.3
One	8.0	18.6	19.2	9.8	16.0
Two	3.1	11.4	7.9	2.8	7.1
Three or more	6.1	24.4	14.5	4.4	13.6
Number	261	483	1140	458	2342

Chi Square significant at the .0001 level

TABLE 5-39

ELDER WHO NEVER LEARNED TO READ BY AGE (ALL HOUSEHOLDS)

Percentage of Elders in Age Cohort

NEVER LEARNED TO READ	55-59	60-64	65-69	70-74	75-79	80-84	85+	AR
Yes			7.0	5.4	6.6	7.7	4.8	5.3
No			90.3	88.7	89.6	88.4	88.9	90.8
Refused			2.7	5.8	3.8	3.9	6.3	3.9
Number								

Chi Square significant at the .01 level

TABLE 5-40

ELDER WHO NEVER LEARNED TO READ BY RACIAL/ETHNIC GROUP (ALL ELDERS)

	% of Elders in Racial/Ethnic Group		
NEVER LEARNED TO READ	WHITE	OTHER	AR
Yes	4.3	13.4	5.6
No	90.7	82.3	89.6
Refused	4.9	4.2	4.8

Chi Square significant at the .0001 level

TABLE 5-41

ELDERS WHO NEVER LEARNED TO READ BY SEX (ALL ELDERS)

NON-READER	MALE	FEMALE	AR
	Percentage of Elders in Sex Type		
Yes	5.1	5.5	5.3
No	88.9	90.2	89.7
Refused	6.0	4.3	5.0
Number	930	1451	2381

Chi Square not significant

TABLE 5-42

ELDERS WHO NEVER LEARNED TO READ BY NUMBER IN HOUSEHOLD (ALL ELDERS)

Percentage of Elders in Household

NON-READER	One Person Household	Two Person Household	Three or More Person Household	AR
Yes	6.1	5.3	5.3	5.5
No	91.8	91.9	90.9	91.7
Refused	2.0	2.8	3.8	2.8
Number	615	1452	321	2388

Chi Square not significant

TABLE 5-43

PREVALENCE OF CHRONIC HEALTH PROBLEMS BY AGE COHORT (ALL ELDERS)

Percentage of Elders in Age Cohort

HEALTH PROBLEM	55-59	60-64	65-69	70-74	75-79	80-84	85+	AR
Arthritis[1]	36.6	43.5	46.7	45.2	49.7	57.9	58.7	46.6
High Blood Pressure[4]	25.0	37.0	36.2	38.3	38.5	42.1	36.5	36.0
Difficulty Hearing[1]	12.5	21.2	22.2	26.0	37.6	37.3	57.9	27.1
Heart Condition[1]	12.9	21.5	19.3	21.4	29.4	28.8	41.3	22.8
Eye Diseases[1]	8.6	8.7	16.0	23.2	30.5	41.2	47.6	21.5
Difficulty Breathing[2]	9.9	14.9	13.7	16.7	19.2	25.3	23.8	16.4
Problems with Teeth/Gums/ Dentures[3]	8.2	14.1	13.7	16.5	15.1	16.3	24.6	14.5
Difficulty Remembering Events[1]	7.8	11.1	12.1	11.7	20.1	21.9	32.5	14.5
Frequent Depression/ Stress/ Anxiety	9.1	13.6	11.7	12.1	13.7	17.6	18.3	12.9
Diabetes[1]	8.6	4.9	8.3	10.6	13.7	10.3	16.7	9.8
Kidney Problems[1]	5.2	7.3	7.9	10.0	13.2	14.2	17.5	9.7
Hardening of the Arteries[1]	6.5	11.4	10.3	12.6	14.3	16.7	27.0	12.5
Cancer[1]	1.7	3.0	7.6	6.1	7.4	6.0	8.7	5.6

TABLE 5-43 (cont.)

PREVALENCE OF CHRONIC HEALTH PROBLEMS BY AGE COHORT(ALL ELDERS)

	Percentage of Elders in Age Cohort							
HEALTH PROBLEM	55-59	60-64	65-69	70-74	75-79	80-84	85+	AR
Difficulty Understanding Instructions[1]	3.4	6.5	5.6	6.5	10.4	11.6	15.1	7.4
Stroke[3]	2.6	3.8	4.5	4.8	6.6	3.9	10.6	4.7
Difficulty Talking[1]	6.5	8.4	8.3	7.8	12.6	17.6	26.2	10.5
Other Emotional Problems	1.7	1.4	1.3	1.1	.3	2.1	2.4	1.1
Parkinson's Disease[4]	1.3	1.1	.4	1.1	1.4	3.4	3.2	1.4
Alzheimer's Disease[2]	---	.8	.7	.6	2.2	1.3	4.8	1.1
Number	360	368	445	462	364	233	126	2358

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[1] Chi Square significant at .0001 level
[2] Chi Square significant at .001 level
[3] Chi Square significant at .01 level
[4] Chi Square significant at .05 level

TABLE 5-44

PREVALENCE OF CHRONIC HEALTH PROBLEMS BY NUMBER IN HOUSEHOLD (ALL ELDERS)

Percentage of Elders in Household

	One Person Household	Two Person Household	Three or More Person Household	AR
Arthritis[1]	60.7	41.5	47.7	47.2
High Blood Pressure[1]	45.3	32.8	32.6	36.5
Difficulty Hearing	30.3	25.8	24.7	26.8
Heart Condition[4]	26.4	20.8	24.0	22.7
Eye Diseases[1]	33.1	16.2	18.3	20.8
Difficulty Breathing[1]	21.3	13.8	19.1	16.4
Problems with Teeth/Gums/ Dentures[2]	20.0	12.8	12.7	14.6
Difficulty Remembering Events[2]	17.8	12.7	13.8	14.1
Frequent Depression/ Stress/Anxiety[1]	23.6	9.0	13.1	13.3
Kidney Problems[1]	15.4	7.7	7.3	9.6
Hardening of the Arteries[3]	16.3	10.6	12.1	12.3
Cancer	4.4	5.7	6.6	5.5
Difficulty Understanding Instructions[3]	10.7	6.4	4.6	7.3

TABLE 5-44

PREVALENCE OF CHRONIC HEALTH PROBLEMS BY NUMBER IN HOUSEHOLD (ALL ELDERS)

Percentage of Elders in Household

	One Person Household	Two Person Household	Three or More Person Household	AR
Difficulty Understanding Instructions[3]	10.7	6.4	4.6	7.3
Stroke	3.8	4.8	5.4	4.6
Difficulty Talking[1]	15.1	8.2	11.9	10.4
Other Emotional Problems[4]	2.2	1.0	.5	1.3
Parkinson's Disease	1.4	1.3	1.9	1.4
Alzheimer's Disease	1.4	.7	1.2	1.0
Number	615	1454	321	2390

[1] Chi Square significant at the .0001 level

[2] Chi Square significant at the .001 level

[3] Chi Square significant at the .01 level

[4] Chi Square signifianct at the .05 level

TABLE 5-45

PREVALENCE OF CHRONIC HEALTH PROBLEMS BY RACIAL/ETHNIC GROUP (ALL ELDERS)

% of Elders in Racial/Ethnic Group

CHRONIC CONDITION	WHITE	OTHER	AR
Arthritis[4]	45.1	51.9	46.0
High Blood Pressure[1]	33.9	47.0	35.8
Difficulty Hearing	27.7	25.8	27.5
Heart Condition	23.1	21.9	23.0
Eye Diseases	21.4	26.9	22.2
Difficulty Breathing	16.0	18.7	16.4
Problems with Teeth/Gums/ Dentures[2]	13.4	22.6	14.7
Difficulty Remembering Events[3]	13.8	20.8	14.8
Frequent Depression/ Stress/Anxiety	13.0	13.1	13.0
Diabetes[3]	8.7	14.8	9.5
Kidney Problems[3]	9.0	14.5	9.7
Hardening of the Arteries[4]	13.0	8.1	12.3
Cancer[2]	6.6	1.1	5.8
Difficulty Understanding Instructions[3]	6.9	9.9	7.3

TABLE 5-45 (cont.)

PREVALENCE OF CHRONIC HEALTH PROBLEMS BY RACIAL/ETHNIC GROUP (ALL ELDERS)

	% of Elders in Racial/Ethnic Group		
CHRONIC CONDITION	WHITE	OTHER	AR
Stroke	4.8	3.5	4.6
Difficulty Talking[3]	9.8	15.2	10.6
Other Emotional Problems	1.4	.7	1.3
Parkinson's Disease	1.2	2.1	1.3
Alzheimer's Disease	1.1	1.8	1.2
Number	1741	283	2024

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[1] Chi Square significant at the .0001 level
[2] Chi Square significant at the .001 level
[3] Chi Square significant at the .01 level
[4] Chi Square significant at the .05 level

TABLE 5-46
PREVALENCE OF CHRONIC HEALTH PROBLEMS BY SEX (ALL ELDERS)

	Percentage of Elders in Sex Type		
HEALTH PROBLEM	MALE	FEMALE	AR
Arthritis[1]	37.8	51.0	45.9
High Blood Pressure[1]	30.3	38.9	35.5
Difficulty Hearing[1]	35.1	21.4	26.8
Heart Condition	22.9	22.1	22.4
Eye Diseases[1]	14.8	25.4	21.3
Difficulty Breathing	16.4	16.1	16.2
Problems with Teeth/Gums/ Dentures[2]	11.0	16.6	14.4
Difficulty Remembering Events	13.0	15.2	14.4
Frequent Depression/ Stress/Anxiety[1]	7.0	16.4	12.7
Diabetes[3]	7.4	11.1	9.7
Kidney Problems	8.7	10.1	9.6
Hardening of the Arteries	13.0	11.9	12.3
Cancer	6.0	5.2	5.5
Difficulty Understanding Instructions	6.0	8.2	7.4
Stroke	4.8	4.5	4.6

TABLE 5-46 (cont.)
PREVALENCE OF CHRONIC HEALTH PROBLEMS BY SEX
(ALL ELDERS)

	Percentage of Elders in Sex Type		
HEALTH PROBLEM	MALE	FEMALE	AR
Difficulty Talking[3]	8.0	11.8	10.3
Other Emotional Problems	1.0	1.5	1.3
Parkinson's Disease	1.6	1.2	1.4
Alzheimer's Disease	1.1	1.1	1.1
Number	930	1452	2382

[1] Chi Square significant at the .0001 level
[2] Chi Square significant at the .001 level
[3] Chi Square significant at the .01 level

TABLE 5-47

PREVALENCE OF CHRONIC HEALTH PROBLEMS BY STATE AND AAA REGION (ALL ELDERS)

Percentage of Elders in Region/State

HEALTH PROBLEM	I	II	III	IV	V	VI	VII	VIII	AR*
Arthritis	45.2	47.5	45.1	45.1	51.0	46.3	46.3	44.4	46.2
High Blood[2] Pressure	34.0	33.2	37.5	44.5	31.5	34.4	35.2	34.3	35.9
Difficulty Hearing	31.6	29.7	26.0	28.2	24.9	26.7	24.7	28.4	27.6
Heart Condition	20.4	23.1	21.7	20.3	24.9	29.8	20.2	23.9	22.9
Eye Diseases[1]	26.0	19.9	19.9	19.4	25.3	25.2	27.5	16.4	22.0
Difficulty Breathing	15.6	17.7	15.5	13.5	12.1	22.1	16.6	19.0	16.4
Problems with Teeth/Gums/ Dentures	13.2	12.7	13.0	15.8	13.2	19.1	17.4	13.4	14.7
Difficulty Remembering Events	14.0	13.6	13.7	14.6	15.6	15.6	16.6	12.3	14.5
Frequent Depression/ Stress/Anxiety	13.6	12.7	11.2	12.1	14.0	16.8	10.5	11.9	12.8
Diabetes	12.0	9.2	10.1	11.3	7.4	6.5	8.9	11.6	9.7
Kidney Problems	10.8	11.7	10.1	9.3	8.2	10.3	8.5	8.6	9.7
Hardening of The Arteries	13.2	12.7	10.5	14.6	10.9	15.6	8.5	13.2	12.5
Cancer	5.2	5.4	5.1	3.7	8.6	8.0	3.2	6.0	5.6

TABLE 5-47 (cont.)

PREVALENCE OF CHRONIC HEALTH PROBLEMS BY STATE AND AAA REGION (ALL ELDERS)

Percentage of Elders in Region/State

HEALTH PROBLEM	I	II	III	IV	V	VI	VII	VIII	AR*
Difficulty Understanding Instructions	5.6	8.5	7.2	9.0	7.0	8.8	6.9	6.3	7.5
Stroke	7.2	5.1	4.3	4.8	3.9	4.2	4.9	4.1	4.8
Difficulty Talking	10.8	11.7	8.7	12.1	9.3	9.5	12.1	9.0	10.5
Other Emotional Problems	1.6	1.6	1.4	.3	.4	2.7	.8	1.9	1.3
Parkinson's Disease	1.2	1.3	2.2	1.7	.8	.8	2.0	1.1	1.4
Alzheimer's Disease	1.2	1.3	.7	.8	.4	2.3	1.6	1.1	1.2
Number	250	316	277	355	257	262	247	268	2232

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[1] Chi Square significant at the .0012 level

[2] Chi Square significant at the .03 level

*Table constructed from smaller data file resulting from joining of Wave I and Wave II data.

TABLE 5-48

IMPACT OF HEALTH PROBLEMS BY AGE (ALL ELDERS)

Percentage of Elders in Age Cohort

FREQUENCY OF RESTRICTION	55-59	60-64	65-69	70-74	75-79	80-84	85+	AR
Arthritis								
Never	42.4	44.4	43.4	44.0	41.9	42.4	30.1	42.3
Occasionally	35.3	30.6	32.2	32.9	32.4	24.2	27.4	31.2
Frequently	9.4	12.5	11.7	14.0	14.0	14.4	23.3	13.5
Constantly	12.9	11.3	11.2	9.2	11.2	15.9	17.8	12.0
Number	132	160	205	207	179	132	73	188
High Blood Pressure								
Never	72.4	65.9	75.9	78.0	74.1	68.0	60.9	72.3
Occasionally	12.1	21.5	17.7	16.4	18.7	22.7	15.2	18.0
Frequently	12.1	5.2	2.5	3.4	3.6	2.1	8.7	4.6
Constantly	3.4	5.2	1.3	2.3	2.9	2.1	10.9	3.2
Number	90	135	158	177	139	97	46	842
Difficulty Hearing								
Never	71.4	54.4	71.7	62.4	58.8	51.2	43.7	59.1
Occasionally	21.4	24.1	16.2	25.6	21.4	23.8	25.4	22.5
Frequently	7.1	10.1	4.0	6.8	12.2	9.5	14.1	9.1
Constantly	---	10.1	7.1	4.3	6.1	15.5	16.9	8.5
Number	43	79	99	117	131	84	71	624
Heart Condition								
Never	26.7	49.4	40.0	37.2	46.7	52.2	41.2	42.7
Occasionally	33.3	27.8	30.6	37.4	31.8	22.4	23.5	30.2
Frequently	20.0	11.4	9.4	11.1	11.2	13.4	21.6	13.0
Constantly	16.7	11.4	20.0	14.1	10.3	10.4	11.8	13.4
Number	47	79	85	99	107	67	51	535
Eye Diseases								
Never	70.0	59.4	60.6	62.6	64.0	62.1	26.7	58.5
Occasionally	10.0	18.8	25.4	13.1	20.7	13.7	28.3	18.6
Frequently	10.0	12.5	4.2	9.3	9.0	8.4	15.0	9.3
Constantly	5.0	9.4	7.0	14.0	6.3	13.7	28.3	12.1
Number	31	32	71	107	111	95	60	507

TABLE 5-48 (cont.)

IMPACT OF HEALTH PROBLEMS BY AGE (ALL ELDERS)

Percentage of Elders in Age Cohort

FREQUENCY OF RESTRICTION	55-59	60-64	65-69	70-74	75-79	80-84	85+	AR
Difficulty Breathing								
Never	26.1	19.6	41.0	29.9	32.9	15.5	23.3	27.7
Occasionally	43.5	46.4	42.6	42.9	38.6	65.5	30.9	45.1
Frequently	26.1	23.2	9.8	15.6	11.4	12.1	23.3	15.7
Constantly	4.3	10.7	6.6	11.7	17.1	6.9	23.3	
Number	23	56	61	77	70	58	30	
Problems with Teeth/Gums/ Dentures								
Never	63.2	46.2	57.4	53.9	53.7	50.0	43.3	52.8
Occasionally	26.3	25.0	27.9	21.1	29.6	23.7	33.3	26.1
Frequently	5.3	23.1	9.8	14.5	11.1	10.5	16.7	13.4
Constantly	5.3	5.8	4.9	9.2	5.6	15.8	6.7	7.5
Number	29	52	61	76	54	38	30	340
Difficulty Remembering Events								
Never	44.4	46.2	62.3	67.3	59.2	46.0	28.2	52.5
Occasionally	33.3	23.1	26.4	23.1	22.5	36.0	46.2	29.0
Frequently	11.1	12.8	3.8	3.8	14.1	10.0	10.3	9.4
Constantly	11.1	17.9	7.5	5.8	2.8	6.0	5.1	7.3
Number	28	39	53	52	71	50	39	332
Frequent Depression/ Stress/Anxiety								
Never	47.6	44.9	43.1	51.9	55.1	48.7	18.2	46.4
Occasionally	23.8	32.7	33.3	37.0	22.4	25.6	45.5	30.9
Frequently	14.3	10.2	15.7	7.4	10.2	17.9	27.3	13.4
Constantly	14.3	8.2	7.8	1.9	10.2	2.6	---	6.6
Number	33	49	51	54	49	39	22	297

TABLE 5-48 (cont.)

IMPACT OF HEALTH PROBLEMS BY AGE
(ALL ELDERS)

Percentage of Elders in Age Cohort

FREQUENCY OF RESTRICTION	55-59	60-64	65-69	70-74	75-79	80-84	85+	AR
Diabetes								
Never	45.0	72.2	70.3	65.3	65.3	70.8	66.7	64.6
Occasionally	30.0	16.7	16.2	12.2	14.3	16.7	14.3	16.7
Frequently	5.0	---	8.1	6.1	8.2	---	4.8	5.5
Constantly	10.0	11.1	5.4	12.2	10.2	8.3	9.5	9.7
Number	31	18	37	49	49	24	21	229
Kidney Problems								
Never	66.7	50.0	47.1	43.5	51.1	33.3	22.7	44.7
Occasionally	33.3	34.6	35.3	37.0	25.5	45.5	45.5	35.8
Frequently	---	3.8	14.7	10.9	12.8	18.2	13.6	11.5
Constantly	---	7.7	2.9	6.5	6.4	3.0	13.6	5.7
Number	19	26	34	46	47	33	22	227
Hardening of the Arteries								
Never	46.7	39.0	51.1	57.9	59.6	51.4	52.9	52.2
Occasionally	20.0	34.1	20.0	26.3	25.0	27.0	20.6	25.1
Frequently	26.7	2.4	13.3	7.0	3.8	10.8	8.8	9.1
Constantly	6.7	22.1	11.1	5.3	7.7	5.4	17.6	10.6
Number	23	41	45	57	52	37	34	289
Cancer								
Never	50.0	63.6	50.0	75.0	77.8	75.0	54.5	65.1
Occasionally	50.0	18.2	14.7	10.7	11.1	8.3	9.1	14.0
Frequently	---	---	11.8	3.6	7.4	---	18.2	7.0
Constantly	---	18.2	14.7	10.7	3.7	8.3	9.1	10.1
Number	6	11	34	28	27	12	11	129
Difficulty Understanding Instructions								
Never	37.5	33.3	60.9	51.7	47.1	34.6	17.6	42.1
Occasionally	25.0	41.7	13.0	6.9	29.4	50.0	41.2	29.1
Frequently	37.5	8.3	8.7	10.3	8.8	11.5	11.8	11.9
Constantly	---	12.5	13.0	20.7	11.8	3.8	29.4	13.3
Number	12	24	23	29	34	26	17	165

TABLE 5-48 (cont.)

IMPACT OF HEALTH PROBLEMS BY AGE
(ALL ELDERS)

Percentage of Elders in Age Cohort

FREQUENCY OF RESTRICTION	55-59	60-64	65-69	70-74	75-79	80-84	85+	AR
Stroke								
Never	16.7	42.9	45.0	36.4	33.3	33.3	15.4	33.7
Occasionally	50.0	---	5.0	22.7	25.0	11.1	15.4	17.7
Frequently	---	14.3	10.0	9.1	16.7	22.2	23.1	13.5
Constantly	33.3	42.9	40.0	31.8	25.0	22.2	38.5	33.3
Number	9	14	20	22	24	9	13	111
Difficulty Talking								
Never	40.0	38.7	54.3	44.4	54.3	50.0	33.3	46.1
Occasionally	40.0	35.5	28.6	27.8	26.1	37.5	26.7	31.2
Frequently	20.0	12.9	8.6	2.8	13.0	5.0	26.7	11.9
Constantly	---	9.7	5.7	16.7	4.3	5.0	13.3	7.9
Number	23	31	35	36	46	40	30	241
Other Emotional Problems								
Never	75.0	40.0	60.0	20.0	---	40.0	50.0	46.7
Occasionally	25.0	40.0	20.0	40.0	100.0	40.0	---	32.7
Frequently	---	20.0	---	40.0	---	20.0	50.0	17.1
Constantly	---	---	20.0	---	---	---	---	3.[illegible]
Number	6	5	5	5	1	5	2	29
Parkinson's Disease								
Never	66.7	50.0	---	40.0	40.0	12.5	50.0	37.[illegible]
Occasionally	33.3	25.0	---	20.0	40.0	75.0	---	35.[illegible]
Frequently	---	---	50.0	---	--	---	50.0	9.[illegible]
Constantly	---	25.0	50.0	40.0	20.0	12.5	---	18.4
Number	5	4	2	5	5	8	4	33
Alzheimer's Disease								
Never	---	33.3	33.3	---	22.2	---	---	15.4
Occasionally	---	33.3	---	66.7	33.3	---	20.0	26.[illegible]
Frequently	---	---	---	---	11.1	---	40.0	11.[illegible]
Constantly	---	33.3	66.7	33.3	33.3	66.7	40.0	42.3
Number	0	3	3	3	9	3	5	26

TABLE 5-49

IMPACT OF HEALTH PROBLEMS BY NUMBER IN HOUSEHOLD

Percentage of Elders in Household

LEVEL OF RESTRICTION	One Person Household	Two Person Household	Three or More Person Household	AR
Arthritis				
Never	39.8	45.0	42.2	42.9
Occasionally	31.1	31.6	28.3	31.0
Frequently	15.4	13.0	11.1	13.5
Constantly	12.9	9.8	16.8	11.8
Number	370	596	152	1118
High Blood Pressure				
Never	67.3	75.8	66.1	71.8
Occasionally	23.7	14.8	20.2	18.4
Frequently	4.9	4.5	4.4	4.6
Constantly	3.3	2.4	7.5	3.3
Number	278	471	116	865
Difficulty Hearing				
Never	54.6	60.9	55.8	58.5
Occasionally	22.4	22.9	28.0	23.4
Frequently	12.1	7.5	10.3	9.2
Constantly	10.3	7.4	5.8	8.0
Number	179	369	78	626
Heart Condition				
Never	49.3	43.4	28.3	43.0
Occasionally	33.7	30.6	25.2	30.8
Frequently	8.0	14.0	17.2	12.6
Constantly	9.0	11.7	27.3	13.1
Number	162	300	77	540

TABLE 5-49 (cont.)

IMPACT OF HEALTH PROBLEMS BY NUMBER IN HOUSEHOLD

Percentage of Elders in Household

LEVEL OF RESTRICTION	One Person Household	Two Person Household	Three or More Person Household	AR
Eye Diseases				
Never	58.4	60.7	47.4	58.2
Occasionally	15.4	18.9	30.2	18.8
Frequently	12.2	7.7	11.2	9.9
Constantly	13.5	11.2	9.5	11.9
Number	201	237	59	497
Difficulty Breathing				
Never	27.4	29.2	26.0	28.1
Occasionally	58.9	42.1	32.0	46.6
Frequently	8.9	19.7	12.0	14.8
Constantly	4.8	9.0	30.0	
Number				
Problems with Teeth/Gums/ Dentures				
Never	48.5	55.7	46.4	52.1
Occasionally	31.9	24.8	19.9	26.7
Frequently	13.5	14.9	13.8	14.3
Constantly	5.3	4.6	19.9	6.7
Number	123	184	41	348
Difficulty Remembering Events				
Never	60.4	53.2	37.8	53.5
Occasionally	26.9	27.6	37.5	28.7
Frequently	6.6	8.6	18.8	9.3
Constantly	4.3	8.9	5.9	7.0
Number	106	177	43	327

TABLE 5-49 (cont.)

IMPACT OF HEALTH PROBLEMS BY NUMBER IN HOUSEHOLD

Percentage of Elders in Household

LEVEL OF RESTRICTION	One Person Household	Two Person Household	Three or More Person Household	AR
Frequent Depression/ Stress/Anxiety				
Never	48.7	46.1	45.2	47.1
Occasionally	31.2	31.1	26.7	30.6
Frequently	11.6	10.0	24.3	12.7
Constantly	6.3	9.3	---	6.7
Number	139	130	42	311
Diabetes				
Never	57.9	72.5	55.5	65.0
Occasionally	23.7	12.5	13.1	16.3
Frequently	2.6	6.4	8.4	5.5
Constantly	10.5	7.8	14.3	9.7
Number	76	117	36	229
Kidney Problems				
Never	43.7	47.6	30.3	44.2
Occasionally	37.1	32.5	58.8	37.2
Frequently	9.5	12.9	6.6	10.8
Constantly	7.5	4.6	4.3	5.8
Number	95	108	23	226
Hardening of the Arteries				
Never	55.1	54.7	23.8	50.7
Occasionally	28.4	23.5	27.5	25.7
Frequently	7.7	8.0	13.2	8.6
Constantly	5.7	10.4	31.5	11.7
Number	98	151	39	287
Cancer				
Never	76.9	61.3	59.7	64.2
Occasionally	3.8	18.5	14.2	14.9
Frequently	7.7	8.5	---	7.0
Constantly	7.7	8.0	21.5	10.1
Number	26	82	21	129

IMPACT OF HEALTH PROBLEMS BY NUMBER IN HOUSEHOLD

Percentage of Elders in Household

LEVEL OF RESTRICTION	One Person Household	Two Person Household	Three or More Person Household	AR
Difficulty Understanding Instructions				
Never	45.5	47.2	15.7	44.1
Occasionally	32.2	27.1	40.0	30.0
Frequently	8.2	9.5	36.5	11.1
Constantly	9.1	14.0	7.8	11.7
Number	61	90	13	163
Stroke				
Never	29.7	42.5	23.7	36.8
Occasionally	36.3	10.8	14.7	16.8
Frequently	12.7	14.4	11.6	13.6
Constantly	21.2	30.9	44.2	30.9
Number	24	70	17	111
Difficulty Talking				
Never	50.3	45.8	39.7	46.6
Occasionally	30.1	31.9	35.8	31.8
Frequently	12.0	10.5	13.7	11.6
Constantly	5.4	7.9	8.1	7.0
Number	92	116	37	245
Other Emotional Problems				
Never	48.2	53.9	---	48.4
Occasionally	36.0	14.1	100.0	28.5
Frequently	15.8	25.0	---	19.5
Constantly	---	7.0	---	3.5
Number	13	14	2	28
Parkinson's Disease				
Never	23.4	39.8	58.2	39.0
Occasionally	64.9	26.0	25.4	35.7
Frequently	11.7	5.2	---	5.9
Constantly	---	28.9	16.4	19.4
Number	9	19	6	34

TABLE 5-50
IMPACT OF HEALTH PROBLEMS BY RACIAL/ETHNIC GROUP
Percentage of Households in Racial/Ethnic Group

FREQUENCY OF RESTRICTION	WHITE	OTHER	AR
Arthritis			
Never	44.4	30.8	42.3
Occasionally	28.6	43.2	30.9
Frequently	14.2	9.6	13.4
Constantly	11.6	16.4	12.4
Number	777	146	923
High Blood Pressure			
Never	74.2	65.9	72.7
Occasionally	16.9	23.5	18.1
Frequently	4.6	2.3	4.2
Constantly	2.4	6.8	3.2
Number	586	132	718
Difficulty Hearing			
Never	60.4	49.3	59.0
Occasionally	22.1	27.5	22.8
Frequently	9.1	11.6	9.4
Constantly	7.6	10.1	7.9
Number	475	69	544
Heart Condition			
Never	43.9	37.1	43.0
Occasionally	30.2	27.4	29.8
Frequently	12.7	17.7	13.4
Constantly	13.2	14.5	13.4
Number	401	62	463
Eye Diseases			
Never	58.7	53.9	57.9
Occasionally	18.0	19.7	18.3
Frequently	10.2	7.9	9.8
Constantly	11.5	17.1	12.5
Number	373	76	449

TABLE 5-50
IMPACT OF HEALTH PROBLEMS BY RACIAL/ETHNICS GROUP
Percentage of Households in Racial/Ethnic Group (continued)

FREQUENCY OF RESTRICTION	WHITE	OTHER	AR
Difficulty Breathing			
Never	26.4	30.2	27.0
Occasionally	46.4	43.4	45.9
Frequently	15.7	17.0	15.9
Constantly	11.1	7.5	10.5
Number	280	53	333
Problems with teeth/Gums/ Dentures			
Never	53.0	50.0	52.4
Occasionally	26.3	32.8	27.7
Frequently	14.7	7.8	13.2
Constantly	6.0	9.4	6.8
Number	232	64	296
Difficulty Remembering Events			
Never	54.7	47.4	53.3
Occasionally	28.2	28.1	28.2
Frequently	9.4	14.0	10.3
Constantly	6.4	8.8	6.9
Number	234	57	291
Frequent Depression/ Stress/Anxiety			
Never	47.5	42.9	46.9
Occasionally	31.7	31.4	31.6
Frequently	12.2	25.7	14.1
Constantly	6.8	---	5.9
Number	221	35	256
Diabetes			
Never	66.7	64.3	66.1
Occasionally	16.7	7.1	14.6
Frequently	7.3	---	5.7
Connstantly	8.7	16.7	10.4
Number	150	42	192

TABLE 5-50
IMPACT OF HEALTH PROBLEMS BY RACIAL/ETHNIC GROUP
Percentage of Households in Racial/Ethnic Group (continued)

FREQUENCY OF RESTRICTION	WHITE	OTHER	AR
Kidney Problems			
Never	47.4	35.0	44.8
Occasionally	32.5	42.5	34.5
Frequently	12.3	12.5	12.5
Constantly	5.2	7.5	5.7
Number	154	40	194
Hardening of the Arteries			
Never	54.8	39.1	53.3
Occasionally	23.1	47.8	25.4
Frequently	7.7	4.3	7.4
Constantly	11.3	8.7	11.9
Number			
Cancer			
Never	66.1	100.0	66.7
Occasionally	13.1	---	12.8
Frequently	6.1	---	6.0
Constantly	10.4	---	10.3
Number	115	2	117
Difficulty Understanding Instructions			
Never	47.3	26.9	43.5
Occasionally	25.9	34.6	27.5
Frequently	11.6	19.2	13.0
Constantly	12.5	15.4	13.0
Number	112	26	138
Stroke			
Never	32.1	40.0	33.0
Occasionally	17.9	10.0	17.0
Frequently	10.7	30.0	12.8
Constantly	38.1	10.0	35.1
Number	84	10	94

TABLE 5-50
IMPACT OF HEALTH PROBLEMS BY RACIAL/ETHNIC GROUPS
Percentage of Households in Racial/EthnicGroups (continued)

FREQUENCY OF RESTRICTIONS	WHITE	OTHER	AR
Difficulty Talking			
Never	42.2	50.0	43.8
Occasionally	30.7	33.3	31.3
Frequently	14.5	4.8	12.5
Constantly	9.6	7.1	9.1
Number	166	42	208
Other Emotional Problems			
Never	40.9	100.0	45.8
Occasionally	35.4	---	33.8
Frequently	18.2	---	16.7
Constantly	4.5	---	4.2
Number			
Parkinson's Disease			
Never	42.9	16.7	37.0
Occasionally	33.3	33.3	33.3
Frequently	9.5	16.7	11.1
Constantly	14.3	33.3	18.5
Number	21	6	27
Alzheimer's Disease			
Never	21.1	---	16.7
Occasionally	21.1	40.0	25.0
Frequently	15.8	---	12.5
Constantly	42.1	40.0	41.7

TABLE 5-51

IMPACT OF HEALTH PROBLEMS BY SEX (ALL ELDERS)

LEVEL OF RESTRICTION	Percentage of Elders in Sex Type MALE	FEMALE	AR
Arthritis			
Never	43.2	41.5	42.0
Occasionally	32.9	30.7	31.4
Frequently	11.5	14.4	13.4
Constantly	11.8	12.3	12.1
Number	349	733	1082
High Blood Pressure			
Never	72.0	72.7	72.4
Occasionally	16.4	18.7	17.9
Frequently	4.4	4.8	4.6
Constantly	4.4	2.7	3.2
Number	278	563	841
Difficulty Hearing			
Never	60.9	56.9	59.0
Occasionally	21.8	23.3	22.5
Frequently	9.2	9.1	9.2
Constantly	7.8	9.3	8.5
Number	322	301	623
Heart Condition			
Never	39.8	44.5	42.6
Occasionally	25.2	33.8	30.4
Frequently	14.0	12.0	12.8
Constantly	20.5	8.9	13.5
Number	211	321	532

TABLE 5-51 (cont.)

IMPACT OF HEALTH PROBLEMS BY SEX (ALL ELDERS)

	Percentage of Elders in Sex Type		
LEVEL OF RESTRICTION	MALE	FEMALE	AR
Eye Diseases			
Never	59.0	58.2	58.4
Occasionally	16.7	19.3	18.6
Frequently	9.8	9.1	9.3
Constantly	11.6	12.4	12.2
Number	138	368	505
Difficulty Breathing			
Never	24.5	29.8	27.7
Occasionally	36.1	50.9	45.1
Frequently	17.7	14.5	15.7
Constantly	21.8	4.8	10.9
Number	147	241	342
Problems with Teeth/Gums/ Dentures			
Never	57.2	51.1	52.9
Occasionally	17.4	29.6	26.0
Frequently	14.9	12.7	13.3
Constantly	10.5	6.2	7.5
Number	101	241	342
Difficulty Remembering Events			
Never	50.7	53.6	52.5
Occasionally	31.4	27.7	29.0
Frequently	9.4	9.3	9.4
Constantly	6.0	8.0	7.3
Number	117	215	332

TABLE 51 (cont.)

IMPACT OF HEALTH PROBLEMS BY SEX
(ALL ELDERS)

	Percentage of Elders in Sex Type		
LEVEL OF RESTRICTION	MALE	FEMALE	AR
Frequent Depression/ Stress/Anxiety			
Never	38.7	48.0	46.0
Occasionally	36.2	29.7	31.1
Frequently	12.5	13.7	13.5
Constantly	9.4	5.9	6.7
Number	64	231	295
Diabetes			
Never	64.4	64.7	64.6
Occasionally	15.6	17.2	16.7
Frequently	5.9	5.3	5.5
Constantly	12.6	8.4	9.7
Number	68	161	229
Falls/ Accidents			
Kidney Problems			
Never	44.9	44.3	44.5
Occasionally	30.8	38.7	36.0
Frequently	15.3	9.5	11.5
Constantly	6.4	5.4	5.8
Number	78	147	226
Hardening of the Arteries			
Never	52.3	52.3	52.3
Occasionally	20.5	28.0	24.9
Frequently	9.3	9.0	9.1
Constantly	13.8	8.3	10.6
Number	120	168	288

TABLE 51 (cont.)

IMPACT OF HEALTH PROBLEMS BY SEX
(ALL ELDERS)

LEVEL OF RESTRICTION	Percentage of Elders in Sex Type MALE	 FEMALE	 AR
Cancer			
Never	59.6	69.1	65.1
Occasionally	22.1	8.0	14.0
Frequently	9.1	5.4	7.0
Constantly	7.3	12.1	10.1
Number	55	75	129
Difficulty Understanding Instructions			
Never	43.1	41.6	42.1
Occasionally	24.8	31.2	29.1
Frequently	12.0	11.8	11.9
Constantly	16.5	11.7	13.3
Number	55	111	165
Stroke			
Never	28.8	36.1	33.1
Occasionally	12.3	21.6	17.8
Frequently	13.3	13.8	13.6
Constantly	43.3	26.9	33.6
Number	45	65	110
Difficulty Talking			
Never	39.6	48.4	45.8
Occasionally	35.5	29.7	31.4
Frequently	9.3	13.1	12.0
Constantly	9.9	7.1	7.9
Number	71	169	240
Other Emotional Problems			
Never	62.5	40.8	46.7
Occasionally	25.0	35.6	32.7
Frequently	12.5	18.9	17.1
Constantly	---	4.7	3.4
Number	8	21	29

TABLE 51 (cont.)

IMPACT OF HEALTH PROBLEMS BY SEX
(ALL ELDERS)

LEVEL OF RESTRICTION	Percentage of Elders in Sex Type MALE	FEMALE	AR
Parkinson's Disease			
Never	33.3	40.2	37.1
Occasionally	40.0	31.4	35.4
Frequently	6.7	11.3	9.2
Constantly	20.0	17.0	18.4
Number	15	18	33
Alzheimer's Disease			
Never	---	23.5	15.4
Occasionally	22.2	29.4	26.9
Frequently	---	17.6	11.5
Constantly			
Number	9	17	26

TABLE 5-52
IMPACT OF CHRONIC HEALTH PROBLEMS BY STATE AND AAA REGION (ALL ELDERS)

Percentage of Elders Reporting Problems in Region/State

FREQUENCY OF RESTRICTION	I	II	III	IV	V	VI	VII	VIII	AR*
BREATHING									
Never	23.1	35.7	25.6	25.0	29.0	20.3	29.3	30.8	27.4
Occasionally	41.0	42.9	48.8	39.6	51.6	45.8	48.8	44.2	45.0
Frequently	12.8	7.1	23.3	25.0	12.9	15.3	17.1	15.4	16.0
Constantly	23.1	12.5	2.3	8.3	6.5	18.6	4.9	9.6	11.1
Undecided	--	1.8	--	2.1	--	--	--	--	.5
Number	39	56	43	48	31	59	41	52	369
HEARING									
Never	59.7	60.0	58.0	50.5	56.3	57.4	73.3	58.4	58.6
Occasionally	19.5	21.1	17.4	27.8	26.6	30.9	16.7	20.8	22.8
Frequently	9.1	10.0	10.1	13.4	6.3	2.9	5.0	14.3	9.3
Constantly	10.4	7.8	13.0	6.9	10.9	8.8	5.0	5.2	8.6
Undecided	1.3	1.1	1.4	1.0	--	--	--	1.3	--
Number	77	90	69	97	64	68	60	77	602
REMEMBERING EVENTS									
Never	45.7	39.0	45.7	54.0	43.6	65.0	73.2	59.4	53.4
Occasionally	20.0	34.1	40.0	22.0	48.7	25.0	19.5	18.8	28.4
Frequently	22.9	9.8	5.7	12.0	5.1	---	2.4	18.8	9.3
Constantly	11.4	12.2	8.6	10.0	2.6	5.0	4.9	3.1	7.3
Undecided	---	4.9	---	2.0	---	5.0	---	---	1.6
Number	35	49	35	50	39	40	41	36	313
TALKING									
Never	40.7	41.7	47.8	35.7	54.2	37.5	63.3	56.6	46.3
Occasionally	29.6	36.1	34.8	42.9	25.0	33.3	13.3	26.1	31.0
Frequently	22.2	5.6	17.4	11.9	8.3	4.2	10.0	13.0	11.4
Constantly	7.4	16.7	---	2.4	4.2	20.8	13.3	---	8.3
Undecided	---	---	---	7.1	8.3	4.2	---	4.3	3.1
Number	27	36	23	42	24	24	30	23	229

TABLE 5-52 (cont.)
IMPACT OF CHRONIC HEALTH PROBLEMS BY STATE AND AAA REGION
(ALL ELDERS)

Percentage of Elders Reporting Problems in Region/State

FREQUENCY OF RESTRICTION	I	II	III	IV	V	VI	VII	VIII	AR*
UNDERSTANDING INSTRUCTIONS									
Never	46.2	42.3	52.9	38.7	44.4	35.0	37.5	41.2	41.8
Occasionally	15.4	23.1	23.5	38.7	33.3	44.0	18.8	23.5	29.1
Frequently	7.7	7.7	17.6	12.9	11.1	10.0	12.5	11.8	11.4
Constantly	30.8	26.7	5.9	9.7	---	10.0	12.5	17.6	13.9
Undecided	---	---	---	---	11.1	---	18.8	5.9	3.8
Number	13	26	17	31	18	20	16	17	158
DEPRESSION/ STRESS									
Never	41.2	41.0	42.8	39.5	62.9	36.6	38.5	71.9	46.4
Occasionally	17.6	35.9	35.7	34.9	17.1	41.5	46.2	25.0	31.7
Frequently	23.5	10.3	17.9	14.0	14.3	12.2	11.5	---	12.9
Constantly	11.8	12.8	3.6	9.3	2.9	4.9	3.8	---	6.5
Undecided	5.9	---	---	2.3	2.9	4.9	---	3.1	2.5
Number	34	39	28	43	35	41	26	32	278
OTHER EMOTIONAL PROBLEMS									
Never	25.0	50.0	25.0	---	--	66.7	50.0	60.0	44.4
Occasionally	50.0	25.0	---	100.0	---	33.3	50.0	40.0	33.3
Frequently	25.0	---	75.0	---	100.0	---	---	---	18.5
Constantly	---	25.0	---	---	---	---	---	---	3.7
Undecided	---	---	---	---	---	---	---	---	---
Number	4	4	4	1	1	6	2	5	27
TEETH/DENTURES/ GUMS									
Never	57.6	38.5	48.6	53.6	55.9	56.0	55.8	52.8	52.5
Occasionally	15.2	20.5	25.7	26.8	29.4	28.0	30.2	27.8	25.8
Frequently	24.2	25.6	11.4	10.7	5.9	8.0	14.0	13.9	13.8
Constantly	3.0	13.8	14.3	8.9	8.8	8.9	---	5.6	7.7
Undecided	---	2.6	---	---	---	---	---	---	---
Number	33	39	35	56	34	50	43	36	326

TABLE 5-52 (cont.)
IMPACT OF CHRONIC HEALTH PROBLEMS BY STATE AND AAA REGION (ALL ELDERS)

Percentage of Elders Reporting Problems in Region/State

FREQUENCY OF RESTRICTION	I	II	III	IV	V	VI	VII	VIII	AR*
ALZHEIMER'S DISEASE									
Never	---	---	33.3	---	100.0	---	25.0	33.3	15.4
Occasionally	33.3	33.3	66.7	---	---	50.0	---	---	26.9
Frequently	---	33.3	---	---	---	---	25.0	33.3	11.5
Constantly	66.7	33.3	---	66.7	---	50.0	50.0	33.3	42.3
Undecided	---	---	---	33.3	---	---	---	---	3.8
Number	3	3	3	3	1	6	4	3	26
EYE DISEASES									
Never	58.5	52.5	55.6	47.8	56.9	56.1	72.5	65.9	58.0
Occasionally	18.5	25.4	18.5	18.8	21.5	16.7	13.0	18.2	18.7
Frequently	7.7	5.1	9.3	13.0	10.8	12.1	4.3	13.6	9.4
Constantly	14.1	15.3	15.6	18.2	9.0	12.0	8.0	2.1	12.0
Undecided	---	---	---	---	---	---	---	---	---
Number	65	59	54	69	65	72	75	47	491
PARKINSON'S DISEASE									
Never	33.3	75.0	16.7	33.3	100.0	---	20.0	33.3	35.5
Occasionally	66.7	---	33.3	33.3	---	50.0	40.0	66.7	35.5
Frequently	---	25.0	16.7	16.7	---	---	---	---	9.7
Constantly	---	---	33.3	16.7	---	50.0	40.0	---	19.4
Undecided	---	---	---	---	---	---	---	---	---
Number	3	4	6	6	2	2	5	3	31
KIDNEY PROBLEMS									
Never	42.3	43.2	39.3	53.1	57.1	44.4	30.0	30.4	43.0
Occasionally	23.1	32.4	35.6	34.4	19.0	37.0	65.0	52.2	36.4
Frequently	30.8	8.1	17.9	6.3	9.5	11.1	5.0	8.7	12.1
Constantly	---	10.8	7.1	6.3	9.5	3.7	---	8.7	6.1
Undecided	3.8	5.4	---	---	4.8	3.7	---	---	2.3
Number	26	37	28	32	21	27	21	27	214

TABLE 5-52 (cont.)
IMPACT OF CHRONIC HEALTH PROBLEMS BY STATE AND AAA REGION (ALL ELDERS)

Percentage of Elders Reporting Problems in Region/State

FREQUENCY OF RESTRICTION	I	II	III	IV	V	VI	VII	VIII	AR*
HEART CONDITION									
Never	43.1	43.1	41.7	48.6	45.3	41.0	46.0	38.1	43.3
Occasionally	27.5	20.8	36.7	25.0	29.7	34.6	28.0	36.5	29.8
Frequently	15.7	13.9	8.3	9.7	18.8	10.3	12.0	14.3	12.7
Constantly	13.7	20.8	10.0	16.7	6.3	14.1	14.0	11.1	13.5
Undecided	---	1.4	3.3	---	---	---	---	---	.6
Number	51	72	60	72	64	78	50	63	510
HARDENING ARTERIES									
Never	57.6	56.4	35.7	64.0	71.4	55.0	33.3	31.4	52.2
Occasionally	12.1	20.5	39.3	24.0	10.7	27.5	33.3	34.3	24.8
Frequently	18.2	7.7	10.7	4.0	---	10.0	11.4	11.4	8.8
Constantly	9.1	15.4	10.7	6.0	10.7	5.0	14.3	20.0	10.9
Number	33	39	28	50	28	40	21	35	274
HIGH BLOOD PRESSURE									
Never	69.4	65.4	72.5	72.2	75.3	76.1	73.6	76.9	72.5
Occasionally	21.2	19.2	16.7	18.4	17.3	15.9	23.0	14.3	18.2
Frequently	5.9	8.7	1.0	2.5	3.7	5.7	3.4	5.5	4.4
Constantly	1.2	5.8	5.9	4.4	1.3	2.3	---	3.3	3.3
Undecided	2.4	1.0	3.9	2.5	2.5	---	---	---	1.6
Number	85	104	102	158	81	88	87	91	796
CANCER									
Never	69.2	52.9	76.9	76.9	63.6	66.7	71.4	50.0	64.8
Occasionally	15.4	17.6	---	7.7	27.3	4.8	---	25.0	13.9
Frequently	---	11.8	---	7.7	4.5	14.3	14.3	6.3	7.4
Constantly	7.7	11.8	23.1	7.7	---	14.3	14.3	6.3	9.8
Undecided	7.7	5.9	---	---	4.5	---	---	12.5	4.1
Number	13	17	13	13	22	21	7	16	122

TABLE 5-52 (cont.)
IMPACT OF CHRONIC HEALTH PROBLEMS
BY STATE AND AAA REGION
(ALL ELDERS)

Percentage of Elders Reporting Problems in Region/State

FREQUENCY OF RESTRICTION	I	II	III	IV	V	VI	VII	VIII	AR*
STROKE									
Never	44.4	25.0	41.7	11.8	50.0	18.2	41.7	45.5	33.6
Occasionally	33.3	18.8	8.3	11.8	---	27.3	16.7	9.1	16.8
Frequently	5.6	12.5	16.7	29.4	20.0	9.1	8.3	9.1	14.0
Constantly	16.7	43.8	33.3	41.2	30.0	45.5	25.0	36.4	33.6
Undecided	---	---	---	5.9	---	---	8.3	---	1.9
Number	18	16	12	17	10	11	12	11	107
ARTHRITIS									
Never	39.8	43.2	39.5	38.0	53.4	40.2	42.3	39.8	42.1
Occasionally	27.4	31.1	35.5	32.9	24.4	23.9	34.2	40.7	31.3
Frequently	13.2	12.8	10.5	13.3	14.5	18.8	11.7	11.9	13.4
Constantly	17.7	12.8	12.9	14.6	6.9	14.5	11.7	5.9	12.2
Undecided	.9	---	1.6	1.3	.8	2.0	---	1.7	1.1
Number	113	148	124	158	131	117	111	118	1020
DIABETES									
Never	40.0	65.5	66.7	60.0	84.2	58.8	86.4	74.2	65.6
Occasionally	33.3	17.2	14.8	15.0	5.3	23.5	4.5	12.9	16.3
Frequently	20.0	---	3.7	2.5	---	11.8	4.5	3.2	5.6
Constantly	6.7	17.2	7.4	12.5	10.5	5.9	4.5	9.7	9.8
Undecided	---	---	7.4	10.0	---	---	---	---	2.8
Number	30	29	27	40	19	17	22	31	215

*Table constructed from smaller data files resulting from joining Wave & Wave II data.

TABLE 5-53

CURRENT USE AND NEED FOR SERVICES
BY AGE COHORT
(ALL ELDERS)

SERVICES	55-59	60-64	65-69	70-74	75-79	80-84	85+	AR
Legal Services								
Current Use	3.9	4.9	5.0	4.5	4.4	4.3	3.2	4.5
Unmet Need	1.3	3.0	2.5	3.9	3.3	2.6	2.4	2.8
Case Mahagement[1]								
Current Use	.9	1.1	2.9	4.3	6.0	10.7	10.3	4.2
Unmet Need	2.2	5.4	4.3	3.9	7.7	4.3	6.3	4.7
Transportation[1]								
Unmet Need	3.9	1.1	4.5	7.6	7.7	9.9	11.1	5.9
Noon Meal At Senior Center[1]								
Current Use	.9	3.3	5.2	7.6	11.0	8.6	11.1	6.2
Unmet Need	1.3	1.6	.7	.6	2.2	1.3	4.0	1.4
Health Education or Activity Program								
Current Use	3.4	4.1	2.9	3.0	2.2	1.7	1.6	2.9
Unmet Need	1.3	1.1	---	.2	1.4	.4	1.6	.7
Home-Delivered Noon Meal[1]								
Current Use	.4	.5	1.8	2.2	3.3	6.9	8.7	2.6
Unmet Need	---	1.1	.9	1.1	4.1	6.0	6.3	2.1
Counseling[3]								
Current Use	2.6	.5	1.4	.4	.3	.4	1.6	1.0
Unmet Need	1.3	1.9	.2	.4	1.9	1.3	1.6	1.1
In-Home Skilled Nursing[4]								
Current Use	---	1.1	1.4	1.7	2.5	2.6	4.8	1.7
Unmet Need	.9	2.4	1.4	1.7	2.7	1.3	2.4	1.8
Employment Training[1]								
Current Use	4.7	.8	.7	.2	.3	---	---	1.1
Unmet Need	1.3	.5	.5	.2	1.1	.4	1.6	.7

TABLE 5-53 (cont.)

CURRENT USE AND NEED FOR SERVICES
BY AGE COHORT
(ALL ELDERS)

SERVICES	55-59	60-64	65-69	70-74	75-79	80-84	85+	AR
Respite Care[1]								
Current Use	.4	---	.2	.2	.8	1.3	.8	.4
Unmet Need	.4	.3	.2	.2	.5	.4	4.0	.5
Nursing Home[2]								
May Need	.4	.8	2.0	1.9	2.7	6.0	5.6	2.3
Day Care								
Current Use	---	---	.2	---	---	---	---	---
Unmet Need	.4	.3	.5	.2	.8	.4	2.4	.5
Caregiver Support Group[3]								
Current Use	---	---	---	.2	---	.9	---	.1
Unmet Need	---	---	.2	.2	1.1	.4	1.6	.4
Number	360	368	444	462	364	233	126	2357

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[1] Chi Square significant at the .0001 level
[2] Chi Square significant at the .001 level
[3] Chi Square significant at the .01 level
[4] Chi Square significant at the .05 level

TABLE 5-54

CURRENT USE AND NEED FOR SERVICES BY RACIAL/ETHNIC GROUP (ALL ELDERS)

% of Elders in Racial/Ethnic Group

SERVICES	WHITE	OTHER	AR
Legal Services			
Current Use	4.9	3.5	4.7
Unmet Need	2.8	2.1	2.7
Case Management[1]			
Current Use	3.3	9.9	4.2
Unmet Need	4.3	7.4	4.7
Transportation[1]			
Unmet Need	4.9	13.4	6.1
Noon Meal At Senior Center			
Current Use	6.1	6.0	6.1
Unmet Need	1.4	1.8	1.4
Health Education or Activity Program			
Current Use	2.5	3.5	2.6
Unmet Need	.6	1.1	.6
Home-Delivered Noon Meal[2]			
Current Use	2.2	4.9	2.6
Unmet Need	1.8	4.9	2.3
Counseling			
Current Use	.8	.7	.8
.Unmet Need	1.0	1.4	1.0
In-Home Skilled Nursing[3]			
Current Use	1.2	4.2	1.6
Unmet Need	2.0	1.1	1.9
Employment Training			
Current Use	.9	.4	.8
Unmet Need	.6	1.1	.6

TABLE 5-54 (cont.)

CURRENT USE AND NEED FOR SERVICES BY RACIAL/ETHNIC GROUP (ALL ELDERS)

% of Elders in Racial/Ethnic Group

SERVICES	WHITE	OTHER	AR
Respite Care			
Current Use	.3	1.1	.4
Unmet Need	.5	1.1	.6
Nursing Home			
May Need	2.2	2.5	2.3
Day Care			
Current Use	---	---	---
Unmet Need	.6	.7	.6
Caregiver Support Group[4]			
Current Use	---	.4	.0
Unmet Need	.4	.7	.4
Number	1740	283	2023

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[1] Chi Square significant at the .0001 level
[2] Chi Square significant at the .001 level
[3] Chi Square significant at the .01 level
[4] Chi Square significant at the .05 level

TABLE 5-55

CURRENT USE AND NEED FOR SERVICES BY SEX (ALL ELDERS)

Percentage of Elders in Sex Type

SERVICES	MALE	FEMALE	AR
Legal Services			
Current Use	4.3	4.5	4.4
Unmet Need	2.3	3.1	2.8
Case Management[1]			
Current Use	2.6	5.2	4.2
Unmet Need	3.1	5.5	4.6
Transportation[1]			
Unmet Need	2.9	7.7	5.8
Noon Meal At Senior Center[3]			
Current Use	4.3	7.4	6.2
Unmet Need	1.3	1.4	1.4
Health Education or Activity Program[2]			
Current Use	1.3	3.9	2.9
Unmet Need	.3	1.0	.7
Home-Delivered Noon Meal[3]			
Current Use	1.6	3.1	2.5
Unmet Need	1.4	2.5	2.1
Counseling[4]			
Current Use	.6	1.1	.9
Unmet Need	.5	1.5	1.1
In-Home Skilled Nursing			
Current Use	1.1	2.0	1.6
Unmet Need	1.2	2.0	1.7
Employment Training			
Current Use	.9	1.2	1.1
Unmet Need	.2	.9	.6

TABLE 5-55 (cont.)

CURRENT USE AND NEED FOR SERVICES
BY SEX
(ALL ELDERS)

	Percentage of Elders in Sex Type		
SERVICES	MALE	FEMALE	AR
Respite Care			
Current Use	.3	.4	.4
Unmet Need	.3	.7	.5
Nursing Home			
May Need[3]	2.0	2.4	2.2
Don't Know	4.7	2.0	3.1
Day Care			
Current Use	.1	---	---
Unmet Need	.4	.6	.5
Caregiver Support Group			
Current Use	---	.2	.1
Unmet Need	.4	.3	.4
Number	929	1452	2381

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[1] Chi Square significant at the .0001 level
[2] Chi Square significant at the .001 level
[3] Chi Square significant at the .01 level
[4] Chi Square significant at the .05 level

TABLE 5-56

CURRENT USE AND NEED FOR SERVICES
BY STATE AND AAA REGION
(ALL ELDERS)

	Percentage of Elders in Region/State								
Services	I	II	III	IV	V	VI	VII	VIII	AR*
Legal Services									
Current Use	5.6	3.5	2.9	5.1	5.1	3.8	5.7	2.6	4.4
Unmet Need	3.2	2.9	4.7	2.5	2.5	3.8	2.8	1.9	2.9
Case Management[3]									
Current Use	5.6	4.4	6.9	3.1	4.3	3.4	4.9	2.6	4.3
Unmet Need	6.4	4.4	5.8	5.6	3.1	5.7	6.1	1.1	4.8
Transportation[3]									
Unmet Need	7.5	3.0	7.3	5.7	4.8	4.3	6.8	3.8	5.3
Noon Meal At Senior Center[2]									
Current Use	9.2	7.3	5.1	3.7	7.0	5.7	5.7	8.6	6.4
Unmet Need	3.2	--	2.5	2.0	.8	1.9	.4	.4	1.4
Health Education or Activity Program									
Current Use	1.6	2.9	2.2	2.0	4.3	3.4	2.8	3.4	2.8
Unmet Need	.8	1.3	.4	1.1	---	1.1	.8	---	.7
Home-Delivered Noon Meal[1]									
Current Use	1.6	3.5	1.1	2.8	1.6	3.1	2.4	4.5	2.6
Unmet Need	4.8	.3	4.0	2.4	2.7	1.9	.4	.7	2.1
Counseling									
Current Use	0.8	1.3	1.4	1.1	.4	.4	.8	.4	.9
Unmet Need	.8	1.6	1.8	1.4	1.6	1.1	.4	---	1.1
In-Home Skilled Nursing									
Current Use	1.2	2.2	2.5	1.1	1.2	2.3	1.6	.7	1.6
Unmet Need	2.4	2.5	2.2	1.1	1.6	2.7	1.6	---	1.7
Employment Training									
Current Use	1.6	1.9	---	.3	1.2	1.8	.4	1.7	1.9
Unmet Need	.4	---	1.1	.6	.4	1.5	.8	.4	.6

TABLE 5-56 (cont.)

CURRENT USE AND NEED FOR SERVICES BY STATE AND AAA REGION (ALL ELDERS)

Percentage of Elders in Region/State

Services	I	II	III	IV	V	VI	VII	VIII	AR*
Respite Care									
Current Use	.4	.3	.4	.6	.4	---	---	.7	.4
Unmet Need	1.2	.6	---	.8	---	.4	.8	.4	.5
Nursing Home									
May Need	3.7	3.1	1.9	1.7	1.0	2.3	2.8	.6	2.1
Day Care									
Current Use	---	---	---	---	---	.4	---	---	---
Unmet Need	1.6	.3	---	.8	---	.4	.8	.4	.5
Caregiver Support Group									
Current Use	---	---	.4	.3	---	---	---	.4	.1
Unmet Need	.8	.6	.4	.3	---	.4	.4	.4	.4
Number	250	315	277	355	257	2623	247	268	2231

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[1] Chi Square significant at the .0001 level
[2] Chi Square significant at the .01 level
[3] Chi Square significant at the .05 level

*Table constructed from smaller data files joined for Wave I & Wave II.

TABLE 5-57

PARTICIPATION IN ACTIVITIES BY AGE COHORT (ALL ELDERS)

Percentage of Elders in Age Cohort

ACTIVITY	55-59	60-64	65-69	70-74	75-79	80-84	85+	AR
TV/ Reading	96.1	94.0	92.1	95.5	92.9	94.4	89.7	93.9
Church/ Synagogue[2]	73.3	74.5	73.4	78.6	78.6	76.0	57.9	74.8
Visiting Friends/ Theater Restaurants[1]	82.8	83.7	80.6	78.1	72.5	60.1	42.9	75.6
Physical Exercise[1]	46.6	43.2	40.8	42.9	32.0	27.0	21.4	38.7
Travel[1]	49.6	50.0	51.4	46.8	34.1	28.8	19.0	43.3
Social Groups[3]	12.5	13.3	20.0	22.5	17.1	14.6	17.5	17.2
Senior Centers[1]	3.9	7.1	11.0	16.2	19.0	16.3	17.5	12.4
Continuing Education[1]	9.5	6.5	4.3	2.8	3.6	2.1	1.6	4.7
Number	360	368	444	462	364	233	126	2357

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[1] Chi Square significant at the .0001 level
[2] Chi Square significant at the .001 level
[3] Chi Square significant at the .01 level

TABLE 5-58

LEISURE ACTIVITIES BY NUMBER IN HOUSEHOLD

	Percentage of Elders in Household			
LEISURE ACTIVITIES	One Person Household	Two Person Household	Three or More Person Household	AR
TELEVISION/READING	96.4	93.9	92.7	94.4
CHURCH/ SYNAGOGUE[3]	76.5	76.3	68.6	75.3
FRIENDS/THEATRE/ RESTAURANTS				
PHYSICAL EXERCISE[2]	35.5	42.2	31.8	39.1
TRAVEL				
SOCIAL GROUPS[3]	20.5	17.2	11.6	17.3
SENIOR CENTERS[1]	19.7	11.0	4.4	12.3
CONTINUING EDUCATION	5.4	4.8	3.2	4.7
Number	615	1454	321	2390

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[1] Chi Square significant at the .0001 level

[2] Chi Square significant at the .001 level

TABLE 5-59

LEISURE ACTIVITIES BY RACIAL/ETHNIC GROUP
(ALL ELDERS)

	% of Elders in Racial/Ethnic Group		
ACTIVITY	WHITE	OTHER	AR
TV/ Reading	92.5	93.3	92.6
Church/ Synagogue[3]	72.9	80.6	73.9
Visiting Friends/ Theater Restaurants[1]	76.5	60.4	74.2
Physical Exercise[1]	39.0	21.2	36.5
Travel[2]	44.0	31.8	42.3
Social Groups	17.5	13.4	16.9
Senior Centers	12.4	11.0	12.2
Continuing Education	4.5	3.2	4.3
Number	1740	283	2023

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[1] Chi Square significant at the .0001 level
[2] Chi Square significant at the .001 level
[3] Chi Square significant at the .05 level

TABLE 5-60

PARTICIPATION IN ACTIVITIES BY SEX
(ALL ELDERS)

ACTIVITY	Percentage of Elders in Sex Type MALE	FEMALE	AR
TV/ Reading[2]	90.3	94.0	92.6
Church/ Synagogue[1]	69.0	76.7	73.7
Visiting Friends/ Theater Restaurants	73.1	75.5	74.6
Physical Exercise[3]	41.0	36.1	38.0
Travel	43.0	42.5	42.6
Social Groups	15.1	18.1	16.9
Senior Centers[2]	8.9	14.4	12.2
Continuing Education	4.2	4.9	4.6
Number	929	1452	2381

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[1] Chi Square significant at the .0001 level
[2] Chi Square significant at the .001 level
[3] Chi Square significant at the .05 level

TABLE 5-61

PARTICIPATION IN ACTIVITIES BY STATE AND AAA REGION (ALL ELDERS)

	Percentage of Elders in Region/State								
ACTIVITY	I	II	III	IV	V	VI	VII	VIII	AR*
TV/Reading	91.2	91.7	92.4	92.1	92.2	94.3	89.9	95.5	92.4
Church/ Synagogue	62.0	69.2	72.9	79.4	78.6	74.0	78.9	73.5	73.7
Visiting Friends Theater/ Restaurants[2]	70.4	68.3	78.0	75.5	80.5	69.1	70.4	81.3	74.2
Phys. Exer.	36.8	37.8	31.9	36.1	40.1	41.2	35.2	41.8	37.5
Travel[3]	50.0	40.3	39.0	44.5	42.8	38.2	36.4	46.3	42.2
Social Groups	20.8	12.7	15.6	18.0	17.9	21.0	14.6	17.2	17.1
Sr. Centers[4]	16.0	14.3	8.3	8.7	17.9	13.4	12.6	13.1	12.8
Cont. Educ.	4.4	4.4	1.1	4.5	5.4	5.0	6.9	3.7	4.4
Number	250	315	276	355	257	262	247	268	2230

[1] Chi Square significant at the .0001 level
[2] Chi Square significant at the .001 level
[3] Chi Square significant at the .01 level
[4] Chi Square significant at the .05 level

*Tables constructed from small data set obtained when joining Wave I & Wave II.

TABLE 5-62

ELDERS WHO HAVE TROUBLE GETTING TRANSPORTATION BY AGE (ALL ELDERS)

Percentage of Elders in Age Cohort

NEED TRANSPORTATION	55-59	60-64	65-69	70-74	75-79	80-84	85+	AR
Yes	3.9	1.1	4.5	7.6	7.7	9.9	11.1	5.9
No	96.1	98.4	95.0	91.8	92.3	90.1	88.1	93.8
Number	360	368	444	462	364	233	126	2357

Chi Square significant at the .001 level

TABLE 5-63

ELDERS WHO HAVE TROUBLE GETTING TRANSPORTATION BY NUMBER IN HOUSEHOLD (ALL ELDERS)

Percentage of Elders in Household

NEED TRANSPORTATION	One Person Household	Two Person Household	Three or More Person Household	AR
Yes	10.7	3.8	5.8	5.9
No	89.3	95.7	94.2	93.8
Number	588	1332	279	2199

Chi Square significant at the .0001 level

TABLE 5-64

ELDERS WHOSE HOUSING SITUATION HAS CHANGED IN THE PAST YEAR BY AGE (ALL ELDERS)

Percentage of Elders in Age Cohort

HOUSING CHANGED	55-59	60-64	65-69	70-74	75-79	80-84	85+	AR
Yes	2.3	2.3	4.0	3.5	3.5	4.1	3.7	3.3
No	97.7	97.7	96.0	96.5	96.5	95.9	96.3	96.7
Number	339	348	423	429	346	220	109	2214

Chi Square not significant

TABLE 5-65

ELDERS WHOSE HOUSING SITUATION HAS CHANGED IN THE PAST YEAR BY NUMBER IN HOUSEHOLD (ALL ELDERS)

Percentage of Elders in Household

HOUSING CHANGED	One Person Household	Two Person Household	Three or More Person Household	AR
Yes	4.2	2.7	3.4	3.2
No	95.8	97.3	96.6	96.8
Number	587	1286	267	2140

Chi Square not significant

TABLE 5-66

ELDERS WHOSE HOUSING SITUATION CHANGED IN THE LAST YEAR BY RACIAL/ETHNIC GROUP

Response	White	Other	AR
Yes	2.8	1.9	2.7
No	97.2	98.1	97.3
Number	1620	262	1882

Not significant .5453

TABLE 5-67

HOUSING SITUATION CHANGED IN LAST YEAR BY SEX (ALL ELDERS)

	Percentage of Elders in Sex Type		
CHANGE	MALE	FEMALE	AR
Yes	2.7	3.5	3.2
No	97.3	96.5	96.8
Number	834	1375	2209

Chi Square significant at the .05 level

TABLE 5-68

HOUSING SITUATION CHANGED IN LAST YEAR BY STATE AND AAA REGION (ALL ELDERS)

Percentage of Elders in Region/State

CHANGE	I	II	III	IV	V	VI	VII	VIII	AR*
Yes	5.2	3.8	1.9	4.3	2.9	5.2	2.2	.8	3.3
No	94.8	96.2	98.1	95.7	97.1	94.8	97.8	99.2	96.7
Number	230	287	258	323	244	249	226	249	2066

Chi Square significant at the .05 level

*Tables constructed from smaller data files resulting from joining of Wave I & Wave II data.

TABLE 5-69

TYPE OF HOUSING FOR ELDERS WHOSE HOUSING HAS CHANGED IN THE LAST YEAR BY AGE (ALL ELDERS)

Percentage of Elders in Age Cohort

TYPE OF HOUSING	55-59	60-64	65-69	70-74	75-79	80-84	85+	AR
House/home	40.0	57.1	85.7	69.2	60.0	44.4	66.7	63.1
Apartment/duplex	40.0	42.9	14.3	23.1	---	11.1	---	20.6
Mobile Home	20.0	---	---	7.7	---	11.1	---	7.7
Other	---	---	---	---	20.0	33.3	33.3	8.5
Number	8	7	14	13	5	9	3	59

Chi Square not significant .1157

TABLE 5-70

TYPE OF HOUSING FOR ELDERS WHOSE HOUSING HAS CHANGED IN THE LAST YEAR BY NUMBER IN HOUSEHOLD (ALL ELDERS)

Percentage of Elders in Household

TYPE OF HOUSING	One Person Household	Two Person Household	Three or More Person Household	AR
House/home	46.0	67.9	100.0	65.3
Apartment/duplex	43.7	10.1	---	20.7
Mobile home	5.1	14.1	---	8.5
Other	5.1	7.9	---	5.6

Chi Square significant at the .05 level

TABLE 5-71

TYPE OF HOUSING FOR ELDERS WHOSE HOUSING HAS CHANGED IN THE LAST YEAR BY RACIAL/ETHNIC GROUP

Type of Housing	White	Other	AR
House/Home	62.2	100.0	65.9
Apartment/Duplex	---	---	---
Mobile Home	21.6	---	19.5
Other	5.4	---	---

Chi Square not significant

TABLE 5-72

HOUSING STATUS FOR ELDERS WHOSE LIVING SITUATION HAD CHANGED WITHIN THE LAST YEAR (BY AGE)

Percentage of Elders in Age Cohort

HOUSING STATUS	55-59	60-64	65-69	70-74	75-79	80-84	85+	AR
Own	60.0	71.4	53.8	64.3	60.0	28.6	33.3	55.8
Rent	40.0	14.3	30.8	28.6	---	42.9	---	26.6
Other	---	14.3	15.4	7.1	40.0	28.6	66.7	17.6
Number	8	7	13	14	5	7	3	57

Chi Square not significant

TABLE 5-73

HOUSING STATUS FOR ELDERS WHOSE LIVING SITUATION HAD CHANGED WITHIN THE LAST YEAR BY NUMBER IN HOUSEHOLD

Percentage of Elders in Household

HOUSING STATUS	One Person Household	Two Person Household	Three or More Person Household	AR
Own	43.8	72.9	55.6	58.9
Rent	51.3	14.7	---	26.2
Other	4.9	12.4	44.4	14.9
Number	21	24	9	54

Chi Square significant at the .01 level

TABLE 5-74

ELDERS WHOSE HOUSING SITUATION HAS CHANGED IN THE LAST YEAR AND WHO HAVE REDUCED RENT DUE TO AGE, DISABILITY OR INCOME BY AGE (ALL ELDERS)

Percentage of Elders in Age Cohord

REDUCED RENT	55-59	60-64	65-69	70-74	75-79	80-84	85+	AR
Yes	---	---	66.7	25.0	---	20.0	---	31.4
No	50.0	100.0	33.3	50.0	---	80.0	---	55.2
Don't Know	50.0	---	---	25.0	---	---	---	13.4
Number	3	1	6	4	0	5	0	19

TABLE 5-75

ELDERS WHOSE HOUSING SITUATION HAS CHANGED IN THE LAST YEAR AND WHO HAVE REDUCED RENT DUE TO AGE, DISABILITY OR INCOME BY NUMBER IN HOUSEHOLD (ALL ELDERS)

Percentage of Elders in Household

REDUCED RENT	One Person Household	Two Person Household	Three or More Person Household	AR
Yes	31.9	22.0	---	29.2
No	55.8	78.0	---	61.7
Don't know	12.4	---	---	9.1
Number	13	5	.	18

TABLE 5-76

ELDERS WHOSE HOUSING SITUATION CHANGED IN THE LAST YEAR WHOSE RENT IS REDUCED DUE TO AGE, DISABILITY OR LOW INCOME BY RACIAL ETHNIC GROUP

Response	White	Other	AR
Yes	36.4	--	33.3
No	54.5	100.0	58.3
Number	11	1	12

TABLE 5-77

SOURCES OF INCOME BY AGE COHORT (ALL ELDERS)

INCOME SOURCE	55-59	60-64	65-69	70-74	75-79	80-84	85+	AR
Social Security[1]	12.9	53.3	89.4	94.4	93.1	94.0	91.3	74.2
Rent/Property Investments/ Savings	30.6	28.0	28.6	33.0	28.0	26.2	26.2	29.2
Retirement/VA/ Military/ Pension[1]	13.4	22.3	28.8	32.5	27.2	27.5	19.0	25.3
Employment/ Business[1]	53.0	32.9	12.8	10.2	9.3	4.7	2.4	19.7
Supplemental Security Income (SSI)[1]	5.6	7.3	11.0	13.7	17.0	21.9	27.8	13.0
Food Stamps[1]	6.5	3.5	3.6	5.6	10.2	12.9	11.9	6.8
Disability Benefits[1]	9.5	9.5	5.9	3.3	2.5	5.6	1.6	5.7
Utility Assistance[3]	4.7	2.2	2.7	4.1	5.8	7.3	7.1	4.4
Pharmacy Assistance[3]	4.3	2.4	2.9	3.7	3.3	7.3	8.7	4.0
Family Members[2]	4.3	1.4	2.5	2.4	5.5	6.9	4.0	3.5
Unemployment Compensation	.4	1.1	.2	.2	---	---	---	.3
AFDC	---	.5	---	---	.3	---	---	.1
Number	360	368	444	461	364	233	126	2356

[1] Chi Square significant at the .0001 level
[2] Chi Square significant at the .001 level
[3] Chi Square significant at the .01 level

TABLE 5-78

SOURCES OF INCOME BY RACIAL/ETHNIC GROUP (ALL ELDERS)

	% of Elders in Racial/Ethnic Group		
INCOME SOURCE	WHITE	OTHER	AR
Social Security	75.9	79.2	76.4
Rent/Property Investments/ Savings[1]	32.5	8.1	29.1
Retirement/VA/ Military/ Pension[3]	27.0	18.7	25.8
Employment/ Business	18.2	15.2	17.8
Supplemental Security Income (SSI)[1]	10.5	26.5	12.8
Food Stamps[1]	4.3	19.8	6.5
Disability Benefits	4.8	7.1	5.1
Utility Assistance[1]	2.9	10.2	4.0
Pharmacy Assistance	3.7	4.2	3.8
Family Members[2]	3.2	6.7	3.7
Unemployment Compensation[2]	.2	1.4	.3
AFDC[3]	.1	.7	.1
Number	1739	283	2022

[1] Chi Square significant at the .0001 level
[2] Chi Square significant at the .01 level
[3] Chi Square significant at the .05 level

TABLE 5-79
SOURCES OF INCOME BY SEX
(ALL ELDERS)

Percentage of Elders in Sex Type

SOURCES OF INCOME	MALE	FEMALE	AR
Social Security	71.4	74.3	73.1
Rent/Property Investments/ Savings	30.5	27.6	28.7
Retirement/VA/ Military/ Pension[1]	33.7	19.3	24.9
Employment/ Business[1]	24.5	16.2	19.4
Supplemental Security Income (SSI)[1]	9.1	15.4	12.9
Food Stamps[1]	3.8	8.6	6.7
Disability Benefits[1]	8.5	3.7	5.6
Utility Assistance	3.1	5.1	4.3
Pharmacy Assistance	3.4	4.3	4.0
Family Members[2]	2.1	4.4	3.5
Unemployment Compensation	.4	.2	.3
AFDC	---	.2	
Number	929	1451	2380

[1] Chi Square significant at the .0001 level
[2] Chi Square significant at the .01 level

TABLE 5-80
INCOME SOURCES BY STATE AND AAA REGION
(ALL ELDERS)

Percentage of Elders in Region/State

INCOME SOURCE	I	II	III	IV	V	VI	VII	VIII	AR*
Social Security[2]	72.2	67.9	74.1	67.7	76.6	72.6	75.1	62.9	70.9
Rent/Property/ Investments/ Savings[2]	33.9	29.0	24.0	26.1	29.2	29.2	22.5	33.3	28.4
Retirement/VA/ Military Pension	25.7	21.6	19.2	24.2	28.3	29.2	23.4	24.9	24.5
Employment/ Business[3]	17.1	21.2	20.0	23.7	19.2	16.7	16.8	24.3	20.2
Supplemental Security Income(SSI)[1]	14.4	13.9	17.3	12.5	9.8	10.6	11.9	8.1	12.3
Food Stamps[3]	6.7	5.2	9.3	6.7	5.9	6.2	6.4	5.2	6.4
Disability Benefits	6.6	3.8	7.6	4.7	5.5	6.6	6.4	6.5	5.8
Utility Assistance[3]	2.6	3.9	6.1	2.7	3.8	3.5	5.9	5.1	4.1
Pharmacy[3]	4.2	5.0	3.4	3.2	4.8	3.3	5.0	1.3	3.8
Family Members [3]	2.5	3.9	5.9	2.5	3.5	2.3	2.8	2.7	3.3
Unemployment Compensation[2]	.9	---	---	1.0	---	.5	.5	---	.4
AFDC[2]	---	-.8	---	---	---	.5	---	---	.2
Number	250	315	276	355	257	262	247	268	2230

[1] Chi Square significant at the .001 level

[2] Chi Square significant at the .01 level

[3] Chi Square significant at the .05 level

*Weighted state totals include individuals for whom regional information is missing.

TABLE 5-81

SOURCES OF HEALTH CARE COVERAGE BY AGE COHORT (ALL ELDERS)

SOURCES OF HEALTH COVERAGE	55-59	60-64	65-69	70-74	75-79	80-84	85+	AR
Medicare[1]	10.6	15.5	85.9	86.8	90.7	88.5	90.2	64.9
Employer/ Union Group Plan (non-HMO)[1]	53.3	42.0	20.4	22.2	19.7	15.8	18.2	28.5
Individual Private Plan (non-HMO)[1]	23.2	27.9	23.6	24.5	16.2	12.3	14.8	21.7
Medicare Supplemental	7.5	11.1	44.1	49.9	50.6	40.0	41.3	34.9
Military/VA/ CHAMPUS[1]	4.0	10.3	8.7	4.9	1.1	2.2	2.5	5.4
Medicaid[1]	3.5	3.9	13.3	18.3	19.7	20.4	23.3	13.5
HMO	.4	1.4	1.6	---	1.1	.4	1.7	.9
Other[2]	5.8	8.6	8.9	6.9	10.3	10.5	5.0	8.2
Number	350	359	436	449	351	228	121	2294

[1] Chi Square significant at the .0001 level

[2] Chi Square significant at the .05 level

TABLE 5-82

SOURCES OF INSURANCE COVERAGE BY RACIAL/ETHNIC GROUP (ALL ELDERSS)

	% of Elders in Racial/Ethnic Group		
INSURANCE	WHITE	OTHER	AR
Medicare	67.4	72.1	68.0
Employer/ Union Group Plan (non-HMO)[3]	28.8	20.1	27.6
Individual Private Plan[4] (non-HMO)	22.7	17.6	22.0
Medicare Supplemental[1]	40.5	18.3	37.4
Military/VA/ CHAMPUS	6.0	3.0	5.6
Medicaid[2]	12.6	22.2	13.9
HMO	.9	---	.8
Other	8.2	5.6	7.9
Number	1672	270	1942

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[1] Chi Square significant at the .0001 level
[2] Chi Square significant at the .001 level
[3] Chi Square significant at the .01 level
[4] Chi Square significant at the .05 level

TABLE 5-83

SOURCES OF HEALTH CARE COVERAGE BY SEX
(ALL ELDERS)

	Percentage of Elders in Sex Type		
SOURCES OF HEALTH COVERAGE	MALE	FEMALE	AR
Medicare	64.1	65.3	64.8
Employer/Union Group Plan (non-HMO)[2]	32.5	26.0	28.5
Individual Private Plan (non-HMO)	22.0	21.3	21.6
Medicare Supplemental	32.6	36.3	34.9
Military/VA/CHAMPUS[1]	9.5	2.8	5.4
Medicaid	11.6	14.9	13.6
HMO	1.4	.6	.9
Other	7.3	8.7	8.1
Number	887	1410	2297

[1] Chi Square significant at .0001 level
[2] Chi Square significant at .01 level

TABLE 5-84
HEALTH INSURANCE COVERAGE BY STATE AND AAA REGION (ALL ELDERS)

	Percentage of Elders in Region/State								
TYPE OF HEALTH INSURANCE	I	II	III	IV	V	VI	VII	VIII	AR*
Medicare[1]	73.0	67.3	64.3	66.4	72.3	66.7	70.7	64.5	67.8
Employer/Union Group Plan (non-HMO)[2]	18.4	27.5	22.4	27.3	26.4	32.7	31.9	30.3	27.1
Individual Private Plan (non-HMO)[2]	24.4	22.9	21.6	17.8	16.4	25.2	23.3	19.2	21.2
Medicare Supplemental[1]	34.0	36.7	37.4	32.6	41.0	32.0	37.3	40.4	36.3
Military/VA/ CHAMPUS	3.3	5.7	4.5	5.0	5.6	7.5	6.0	6.2	5.5
Medicaid[1]	16.8	16.6	17.7	11.8	11.6	11.4	15.9	12.3	14.2
HMO[1]	2.1	1.4	.4	1.2	.4	---	.9	1.2	.9
Other[3]	5.7	6.1	8.2	8.9	12.4	8.7	10.3	7.3	8.3
Number	250	315	276	355	257	262	247	268	2230

[1] Chi Square significant at the .0001 level
[2] Chi Square significant at the .001 level
[3] Chi Square significant at the .01 level

TABLE 5-85

ELDERS REPORTING ADEQUATE MONEY BY AGE COHORT (ALL ELDERS)

Percentage of Elders in Age Cohort

ADEQUATE MONEY	55-59	60-64	65-69	70-74	75-79	80-84	85+	AR
Yes	74.1	77.9	73.8	75.9	69.2	72.5	76.4	74.2
No	17.3	12.7	17.5	14.4	13.2	17.4	15.5	15.3
Sometimes	8.6	9.3	8.6	9.7	17.6	10.1	8.2	10.5
Number	341	353	428	432	341	218	110	2223

Chi Square significant at the .01 level

TABLE 5-86

ELDERS REPORTING HAVING ADEQUATE MONEY BY RACIAL ETHNIC GROUP

Response	White	Other	AR
Yes	78.0	50.4	74.1
No	12.7	31.6	15.3
Sometimes	9.3	18.0	10.6
Number	1627	266	1893

Chi Square significant at the .0001 level.

TABLE 5-87

ELDERS REPORTING ADEQUATE MONEY
BY STATE AND AAA REGION
(ALL ELDERS)

Percentage of Elders in Region/State

ADEQUATE MONEY	I	II	III	IV	V	VI	VII	VIII	AR*
Yes	78.7	78.7	70.0	68.5	77.2	76.5	71.3	76.4	74.5
No	15.5	12.7	14.4	20.1	12.9	10.1	20.8	13.8	15.1
Sometimes	5.8	8.6	15.6	11.4	9.4	13.3	7.9	9.8	10.4
Number	250	315	276	355	257	262	247	268	2230

Chi Square significant at the .002 level

*Tables constructed from smaller data set resulting from joining Wave I & Wave II data.

TABLE 5-88

ELDERS REPORTING HAVING ADEQUATE MONEY BY SEX (ALL ELDERS)

	Percentage of Elders in Sex Type		
ADEQUATE MONEY	MALE	FEMALE	AR
Yes	76.3	72.8	74.1
No	14.5	15.9	15.4
Sometimes	9.2	11.3	10.5
Number	839	1378	2217

Chi Square not significant